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A Systematized Technic for Treating Abdominal Fistulae

CHARLES C. MILLER, M.D.,
Chicago, Ill.

The surgeon who has an effective technic for treating fistulae involving the abdominal cavity will find these cases common enough for there are many operators who do not encourage these patients to submit to operation. It is the usual thing to see these cases after they have consulted other surgeons and for one reason or another these operators have not taken advantage of the opportunity to operate.

While the writer does not pretend that these cases are particularly easy to treat surgically, neither are they especially difficult to handle, even though adhesions be extensive and tortuous suppurating tracts exists. If adequate precautions are taken, and the surgeon has his surgical pathology well in mind, it is not hard to guard against the dangers of infection so that while one may not in a large number of cases have a perfect score, the mortality at least should be very small.

Without precautions this of course cannot be said, for while chronic infected tracts may contain germs of very little virulence, the operator, who presumes that they are, is likely to have some unhappy experiences.

Cultural tests usually demonstrate the presence of staphylococci. Perhaps such examinations should always be made, though the writer must confess, that so far as he is concerned personally, he has confidence in his ability to cope with any of the infections which he has found in these cases.

While the abdominal wall may have only a short straight tract, the site of a drainage tube in a previous operation, the abdominal cavity itself in most of these cases will have pockets or tracts containing considerable suppurating granulating tissues. The presumption should always be that there is a gross infection, that there will be plenty of pus to produce a deadly peritonitis if steps be not taken to prevent such an occurrence. Elaborate precautious are not necessary to guard against gross contamination, in fact an effective technic will be a simple one. Those measures which prevent the spread of infection are few indeed so with a well thought out plan which can easily be followed, surgeons may operate expeditiously and effectively in these cases.

First of all we must consider the method which shall be followed in handling the abdominal wall, and the infected tract or tracts it contains. Sometimes considerable suppuration follows infection of the deeper sutures placed in closing abdominal incisions, and operation may show, instead of fistulae, simple suppurating sinuses of the abdominal wall itself. Of course probing in the preliminary examinations before operation will usually cause the surgeon to suspect such states.

If, before operation, there is no convincing evidence of abdominal cavity involvement, it may be worth while to have the tract or tracts injected with barium and radiographs made from different angles so that the extent of the suppurating passages may be estimated. The mixture injected should not be too thick, and the injections may be safely made with considerable force if the fistulae have existed for any length of time, as beyond the infected granulations within the passages there is always a firm fibrous or connective tissue deposit.

To know exactly where and how far tracts invade the abdomen is not important to the surgeon, for once within the abdomen it is not hard to follow these tracts with a probe or director, and one can never safely presume that any injection will pass to the limits of these infected tracts. If the surgeon's technic be correct, he should not have any trouble in following these fistulae, and it is all important if a cure is to be effected that all pockets and tracts be completely exposed, curetted and drained.

As considerable time may be taken in dealing with the conditions in the abdominal wall and those within the cavity of the abdomen, it is a good plan to do what surgery there is to be done to the abdominal wall with local anesthetics. It is an easy matter to infiltrate along each side of the scar line of the old operation.

If one or two per cent solution of novocain be used, the tissues will be quickly anesthetized so that with a sharp scalpel one may cut along each side of the scar of the previous operation, loosening the scar tissues from

the healthy tissues. Of course in the preparation of the abdomen for operation all pus has been pressed out of the fistulous openings and their orifices wiped out with iodin solution.

It is not a good plan to merely split open abdominal wall tracts. It is better to excise as much scar tissue as is possible from the abdominal wall. Better unions can be secured afterwards. When the scar has been loosened on each side down to the peritoneum, a probe may be passed through the fistulous opening, and if it is seen that the tract passes within the abdomen, the surgeon should proceed to freely open the abdomen.

It is only through comparatively large abdominal incisions that intra-abdominal fistulae can be safely traced. A surgeon may handicap himself a great deal and lose much valuable time trying to operate through small incisions in these cases. Free incisions make it possible to guard against infection spreading. When patients are very nervous before infiltrating the abdomen, in fact a half hour before they are brought to the operating room, a quarter grain of morphia with one hundredth grain of scopolamin will tend greatly to produce a state of mind in the patient which may make it much easier to use the local anesthetic.

Should there be several fistulous openings in the abdominal wall, it may not be practicable to avoid the use of the director. This instrument passed along the tracts serves to guide the operator's scalpel in splitting all abdominal wall sinuses. These are lined with granulating masses and when a sharp curette is used, the granulations will be found resting upon a firm fibrous like membrane. When practicable these fibrous tracts may advantageously be excised. Sometimes such fibrous tissues are so diffused that such excisions may interfere subsequently with a neat and workmanlike abdominal wall closure so that more or less discretion may be exercised in excising these connective tissue deposits.

Before the operation enters the abdominal cavity, after tracing out and thoroughly cleaning all abdominal wall tracts, it is necessary to completely control every particle of bleeding. In some cases after curetting away all granulations and excising all the connective tissues which it seemed judicious to do, the writer has stopped to use freely, active antiseptics and to make an antiseptic toilet of the wound. Ether, alcohol or solution of iodin may be used for this purpose. Perhaps of all of these iodin is the most effective.

With a dry wound a director is passed into the fistulous opening which enters the abdominal cavity. The peritoneum may be opened around the director. Infected tissues surrounding the director are excised. If such procedure is not practicable, the tract may be split for an inch or so. The curette should then be used and all infected granulations carefully cut away, and removed from the field.

With the abdomen freely opened, the surgical strategy from now on consists of opening up an inch or so of fistula at a time, thoroughly cleaning up, then proceeding a step further.

Of course intra-abdominal operations involving adherent intestinal loops, omentum and the various organs must each be conducted according to the conditions found, but the policy of following an infected tract, cleaning out the infected materials as one proceeds, and avoiding gross contamination will make a great difference in the degree of soiling the field. It is not unusual to see in our largest and best clinics operators after once entering the abdomen breaking adhesions indiscriminately. When the surgeon's fingers are thus used without generalship, the whole region is grossly soiled and contaminated. When an effort is made to do so, much of the work within the abdomen may be done with instruments and the operator's gloves not even soiled. This too without the loss of time, for with a plan of operation extensive adhesions may be rapidly separated.

Successful fistula operations demand that the surgeon find all infected passages, clear them out, remove any fragments of partly necrosed tissues, infected non-absorbable sutures left in previous operations, and close any openings into the intestinal tract when a true fecal fistula exists.

Long training of American surgeons has made the practice virtually universal of walling off the general abdominal cavity with lap sponges. Little need be said upon this score. It is well known of course that the surgeon may operate upon infected intra-peritoneal conditions and hope for success because of the protective efforts of the peritoneal structures. While it is important that contamination be avoided as much as possible the operator must expect in all of these infected cases more or less of a reaction. It is such reactions which are the greatest protective factors. During the past few years ether has been used extensively in the toilet of the peritoneum by many surgeons. The antiseptic qualities of the ether have been emphasized. As a matter of fact it is perhaps more likely that the value of the ether is more in promoting adhesions where adhesions are needed by hastening the congestion of the tissues after operation.

In these cases we want adhesions after operation and we want them where they will do the most good. For this reason in many cases it is well to place the omentum where it will protect the general abdominal cavity from infection, and if it can better be kept at that point by sutures, it is no doubt good surgery to so fix it.

As an insurance of quick adhesions the use of iodin solutions upon exposed peritoneal surfaces is perhaps much better than ether. The chemic irritation of tincture of iodin is much greater than ether. It is not sufficient to in any way endanger peritoneal structures. When lap sponges are removed, if the circumference of the operative field is quickly mopped with iodin solution, the operator can close with pretty definite assurance that the subsequent infective reaction will be a localized one and not general.

There is not much to be gained by closing closely around small drainage tubes. Adequate drainage is well worth the slightly added tendency to ventral hernia. Ventral hernia limited to the site of the tube may be overcome readily under local anesthetics if not allowed to go too long. In view of the very slight reactions and discomforts of such operations measures for adequate drainage should always be taken.

Gall-Stones

Too much reliance should not be placed upon the x-ray in the early diagnosis of gall-stones. Of much greater value are the presence of (1) long-continued dyspepsia, of the flatulent type, not yielding to diet and simple remedies; (2) pain and tenderness in the upper or lower right quadrants, without symptoms of acute inflammation; and (3) remote symptoms, such as joint and muscular pains, arising from the gall-bladder as a focus of infection.—(*Practitioner.*)

Normality

A body in good running order is usually indicated by: alert expression; unobstructed breathing; clear, red tongue; steady nerves without restlessness—repose; cheerful disposition; good muscular coordination; no distress on ordinary exertion; proper weight for height, age and type.—Dr. Hugh Chaplin.

Diabetes

In diabetes, it is the sugar in the *blood* that does the harm, not that in the urine. Frequent blood-sugar estimations should be made on all diabetics.—Dr. Bernard Fantus.

Polyserositis (Pick's Disease)

With Report of Two Cases and Necropsy Findings

HYMAN I. GOLDSTEIN, M. D.,

ASSISTANT VISITING PHYSICIAN, PHILADELPHIA GENERAL HOSPITAL; ASSISTANT VISITING PHYSICIAN AND CHIEF OF THE MEDICAL CLINIC, NORTHWESTERN GENERAL HOSPITAL, PHILADELPHIA.

Camden, N. J.

In 1911, Dr. Reynold Webb Wilcox, second president of this society, discussed "The Treatment of Chronic Universal Perihepatitis." In his paper, read before this society, Dr. Wilcox reported that antipyrin salicylate in 10 grain doses, given every two to four hours, relieved the symptoms and limited the duration of the exacerbations to a very few days or sometimes hours. Usually at the expiration of thirty hours the patient regained his normal condition. The only other recommendation made was frequent paracentesis as required and repeated indefinitely.

I have nothing particularly new and encouraging to offer in the way of therapy in this interesting condition. I hope that some discussion will follow the report of these cases, that may enlighten us on how best to treat this disease, and how to make an early diagnosis.

I reviewed the literature on the subject most thoroughly, including nearly all of the one hundred and twenty-five papers on record. However, I have not been able to reach any very definite conclusions as to the best treatment.

Diagnosis often is made very late in the disease, and nothing seems to help except frequent paracentesis. Heliotherapy, autoserotherapy, vaccine therapy, roentgen-ray treatment, the Talma operation, removal of sources of focal infection, calcium salts (by mouth and by injection), novasurol injections, theocalcin, etc., have all been tried with variable results.

Babcock suggested the use of ascitic fluid (intravenous) injections in malignant cases. This might be tried in bad cases of Pick's Disease.

The disease has been known under different names—Polyserositis, Concato's Disease, Pick's Disease, pericarditic pseudo-cirrhosis of the liver.

Nicholls (1903) reported some rare forms of chronic peritonitis with productive fibrosis and hyaline degeneration and recorded four cases with necropsy findings. He refers to Herrick's, Strajesko's and Curschmann's "icing-liver" type of multiple involvement of the serous membranes as being due to tuberculosis. Nicholls recommends tapping at increasingly frequent intervals, and at times simple abdominal section. He suggests the use of caffein for relieving the ascites.

George H. Evans, president of our society last year, in 1918 (*Am. J. M. Scs.* p. p. 553-561, N. series, 155) reported a case of multiple serositis with necropsy findings. A single man aged 54 years, a native of Panama, with a very unhealthy mouth, many diseased teeth and considerable pyorrhea. He had typhoid fever 15 years previously and also gave a history of acute rheumatism, when a young man. Kelly's (1903) case also had a similar history of *rheumatism*.

Louis Hamman (May, 1919, *Clins. N. A.* p. 1747) speaks of serous membrane tuberculosis and refers to the fact that "tuberculous polyserositis has a close relation to an interesting group of cases exhibiting a chronic inflammation of one or more of the serous sacs. These cases are described in the literature as Zuckergussleber (Curschmann), pericarditic pseudo-cirrhosis (Pick), polyserositis and polyorrhemenitis. They are characterized by.

(1). A chronic inflammation with formation of a dense, thick fibrous exudate.

(2). Transcient attacks of acute inflammation.

(3). The formation of abundant effusions.

(4). The absence of bacteria and of typical histologic structure in the fibrous exudate.

(5). The striking chronicity of the condition."

What its exact relation is to tuberculosis, rheumatism, and other infections remains to be determined. How an early diagnosis can best be made is difficult to say.

Pick reported his 3 cases of pericarditic pseudo-cirrhosis of the liver n 1896—and no great advance has been made to date.

Herrick, of Chicago, reported a case in 1902, with necropsy findings, a young man aged 19 years—Pick believed the pericarditis to be primary and the cirrhosis to be the "Cirrhose Cardiaque" of Sabourin (Sabourin: Cirrhose sushepatique d'origine cardiaque. Revue de Medicine Juillet, 1883.)

Musser, who also saw this patient, thought it to be one of adhesive pericardic—mediastinitis with cirrhotic liver.

Rubinstein's (1909) patient was three years old.

Ewing (1921), Peutz (1923), Reid (1920), Mosler (1910), White (1886), Martelli (1917), Maggesi (1921), Foster (1917), Cardarelli (1923), Niesser (1922), W. J. Mayo (1922), Chace (1908), Lamb (1921), Whitcher (1924), Kelly, A. O. J. (1903), and others have written on this subject.

REPORT OF CASES

CASE I. Charles K. E2301½. Men's Med. Ward 14. Service of Doctor Ashton. Philadelphia General Hospital. Admitted: March 29, 1913. Died: April 29, 1913.

Multiple Serositis.—Arteriosclerosis and chronic interstitial nephritis.

Patient was a white man, aged 38 years, teamster by occupation.

Chief complaint—Pain in abdomen.

Family History.—Negative, except that one brother died of tuberculosis.

Social History.—Was born and lived in Philadelphia all his life. Teamster for 12 years. Drank to great excess. Smoked many cigarettes.

Past Medical History.—Had measles and mumps when a child. Fell when 18 months old and six months later a kyphosis was noticed. Denies all other diseases except bubo at 31, and chancre at 34 with very little treatment. No history of rheumatism, typhoid fever or malaria.

History Present Illness.—Patient was taken ill March 24th with pain in the abdomen and chest. Pain over the heart was quite severe and was worse on coughing or deep breathing. He was forced to stop work and come to the hospital. On admission he complained of a great deal of pain in the abdomen. Vomited considerable before admission to hospital. Had sudden sharp pain (on admission) in epigastrium, severe enough to make him cry. Has had a slight cough for some time, but no spitting of blood, no expectoration, no night sweats. Thinks he lost some weight, because of irregular life. Has had palpitation; dyspnoea on exertion. No swelling of extremities; vertigo.

On March 31, 1913, patient was seen by Dr. David Riesman. Patient is a dwarf, the result of spinal kyphosis said to be the result of a fall from a girl's shoulder, when a child. Has been drinking heavily and taken ill on March 24th, 1913, with pain over upper abdomen and chest, nausea and vomiting. Slight cough—pain is constant, worse during past five days. Patient looks pretty well, breathing is rapid. Marked bulging and tenseness below costal arch and down to umbilicus. Whole abdomen

* Read before The American Therapeutic Society, Atlantic City, N. J., May 23, 1925.

distended and tender to touch. Tympanitic and tender especially to the right and in epigastrium. No undue venous distention. Liver dullness is not obliterated. Veins in right axillary region, chest and abdomen, distended. Dullness over right chest up to angle of scapula and on left side not so high. Some fine crackling rales over both lungs posteriorly from clavicle to base.

Heart apex in 4th interspace just in front of nipple. Heart sounds strong, pulsation in second and third interspace. There is pulsation in vessels of neck. Radials markedly thickened. Skin of back and hands cyanotic. No edema of legs.

April 8, 1913. Vein in right axilla down to flank as large as lead pencil.

April 12, 1913. *Von Pirquet test*—is positive.

Pupils equal, react to light and accommodation.

Nasal Polyp in right side, fills passage.

Tongue very dry—sordes present. Some pyorrhea.

Neck.—Pulsation in supra-sternal notch. No general adenopathy. Pulsation of vessels of neck.

Chest.—Deformed because of kyphosis. There are large veins in axilla and flanks, anterior chest and abdominal wall.

Respirations are very rapid and shallow.

April 15, 1913. Cannot extend right leg. Fine crackling rales below and to inner side of right nipple. Good many rales in left axillary region and at bases. Seen by Dr. Riesman.

April 28, 1913. Seen by Dr. Riesman. Patient has acute precordial pain, temperature 102 degrees, pulse 132, respiration 48. Fine crackling apparently pulmonary and not pericardial in region of apex. Dullness on right side from 4th interspace down. Patient very sick, cannot turn. Marked myoedema.

Urine Analyses.—3/30/13. Dark amber, cloudy, alkaline, 1.015, no sugar, no albumin.

4/12/13. Dark amber, no sugar, trace of albumin, hyaline casts, and some leucocytes.

Blood Count.—3/30/13. W. B. C. 9,000. Polys. 64, small lymphs. 28, large lymphs. 8.

4/12/13. Hemoglobin 75 per cent. R. B. C. 3,550,000. W. B. C. 16,600.

Gastric Analysis.—3/31/13. *Total Acidity*—36 cc. $\frac{n}{10}$ NaoH to neutral. 100 c.c. No free hydrochloric acid. No blood.

X-ray.—4/14/13. No. 1007. Unsatisfactory—(Manges and Holmes).

4/29/13. Patient died. Pick's Disease.

NECROPSY RECORD, CASE I.

PHILADELPHIA GENERAL HOSPITAL

Charles Kane: Autopsy No. 3214. Volume XXVIII. Page 21. 1913.

Clinical Diagnosis: Tuberculous multiple serositis.

Pathological Diagnosis: Chronic fibrous serositis of peritoneum, pleura and pericardium.

Loculated, purulent peritonitis with communicating psoas and liver abscess.

Parenchymatous degeneration of heart.

Chronic apical tuberculosis.

Passive congestion and edema of both lungs.

Hypostatic pneumonia, upper left.

Acute splenic tumor.

Bilateral hydronephrolithiasis.

Parenchymatous degeneration of pancreas.

Arteriosclerosis. Chronic aortic and mitral valvulitis.

Acute vegetative aortic endocarditis.

Dr. Kenneth M. Lynch.

Body of an adult white male with kyphosis of lumbar and lower thoracic vertebrae, small statue, protruding abdomen. Slightly emaciated, rigor mortis well developed.

Abdomen: Cavity very much distended. Whole right side filled with thick, creamy yellow pus, having a slight fecal odor, well walled off by organizing adhesions distending upward over the surface of the liver and to the mid line of both surfaces. Walled off from pelvis containing about one gallon of pus. Over spleen is another similar abscess swollen in size. Pelvis contains the same character of pus and there are several smaller cavities between coils of intestines. Remainder of peritoneal cavity practically obliterated by old dense fibrous adhesions. Intestines and stomach displaced to left.

Chest: Pleural cavities and pericardium obliterated by old fibrous adhesions.

Heart: Fat decreased. Surface rough and fibrous showing numerous petechial hemorrhages. Myocardium-normal thickness, pale and flabby. Endocardium transparent. Mitral 8 mm. thickened, shortened 7 mm., slightly thickened, adherent at edges for a short distance. The angle between the two is a large soft pink vegetation.

Pulmonary and tricuspid thin, transparent, aorta fairly elastic, rough corrugated outline.

Lungs: Small, heavy, rough, fibrous surface, crepitation poor. Fibrous apices in which are numerous small firm white nodules.

On section dark red exuding frothy fluid. Posterior part of upper felt is consolidated. Soft, dark reddish gray. Sinks in water.

Spleen: 16 x 8 x 3½ cm. thick fibrous ragged capsule, soft dark red affluent pulp.

Kidneys: Left: measures 12 x 6 x 3 cm., cortex 8 mm., entire substance 21 mm. firm dark red, capsule strips easily. Pelvis and calices dilated, contain urine. Some of the calices filled with small gravel like stone.

Right: 11 x 4 x 4 cm. entire substance 9 mm. very firmly adherent to posterior abdominal wall. Is firm of good consistence and color the middle portion show no kidney substance and the pelvis is dilated to surface. The remainder of pelvis and calices distended with urine and one small mulberry stone.

Liver: 35 x 19 x 8 cm. Right surface covered with thick fibrous purulent material. Left with fibrous adhesions. In the under surface of the left lobe is a rounded orifice admitting the finger into a cavity containing a thick yellowish white purulent material surrounded by softened liver structure, communicating with pus cavity mentioned above. The organ is soft, friable of a cloudy matter, yellowish gray color.

Pancreas: Normal size, pale, soft, lobules indistinct.

Adrenals: Nodular, yellowish contex very soft, reddish medulla.

On the right kidney a sinus is opened behind it, running along the right psoas muscle down behind Poupart's ligament as far as may be explored into the thigh containing a thick purulent material with thick fibrous walls, communicating with the abdominal abscess by a small rounded orifice. On the inner surfaces of both thighs about the junction of upper and middle third are atrophic scars and a sinus on the right may be traced to the region of the scar on the side.

CASE II.

PHILADELPHIA GENERAL HOSPITAL

Ward or Willard Richmond.—Medical Service of Dr. L. Napoleon Boston, Chief; Drs. A. E. Blackburn and H. I. Goldstein, Assistant Chiefs.

Admitted 5/15/24; died 6/7/24. Diagnosis: Chronic Myocardial Degeneration, Auricular Fibrillation, Right Empyema.

Resident Physician: Dr. G. S. Enfield.

Chief Complaint.—Weakness. Palpitation.

Family History.—Father living and well; mother living and well; two brothers living and well; two brothers died in infancy, cause unknown. No history of nephritis, heart trouble, diabetes, cancer or tuberculosis.

Personal History.—Male, white, aged 23 years; nativity—Philadelphia; occupation—ironworker.

Past Medical History.—Usual childhood diseases. No scarlet, diphtheria or typhoid. Pneumonia 1920. Was in P. G. H. three weeks on bridge and five weeks in ward. No operations or injuries.

History Present Illness.—Dates his present illness from attack of pneumonia which he had in 1920. Upon his discharge he first noticed swelling of feet, so that he could hardly get his shoes on. He went home and was forced to rest most of the time. Standing or walking always caused swelling of ankles. Two weeks later he noticed his face and eyes were puffy in the morning. At this time he had no trouble with his water.

Three months after his discharge in 1920 he tried to work, but was forced to stop because of weakness and dyspnoea. Palpitation marked on exertion or excitement.

Has been virtually an invalid for past four years with above complaints. Has had 12 doctors without benefit. Never had a paracentesis done and only three urinalyses. Went to Jefferson Dispensary; Phipps Institute; Pennsylvania Hospital; most of the doctors told him he had heart and kidney trouble.

For the past fifteen days he has been very ill—edema, face and legs; dyspnoea; palpitation; weakness; oliguria; watery stools; poor appetite; water on the stomach. Thinks he has lost weight, but hard to tell because of water. Has noticed no change in skin.

General Physicial Examination and Admission Note.—This young man was admitted in late evening in great distress, dyspneoic, with marked edema of face and legs, ascites, collection of fluid in right scrotum, pale sallow skin, pale mucous membranes.

Paracentesis abdominalis done immediately gave 1¼-2 gallons of usual straw colored fluid. Patient was greatly relieved.

Head.—Scalp—negative.

Eyes.—Pupils equal, somewhat oval, but react to light. Sclerae clear. Mucous membranes pale.

Ears and Nose.—Negative.

Mouth.—Teeth are dirty, but in fair condition, several missing. Lips slighly paler than normal and somewhat cyanotic. The tonsils are small.

Face.—Edematous eyes and cheeks, but no actual pitting. Color of skin is a dirty, sallow, yellow.

Neck.—Veins engorged and pulsating rapidly with no rate or rhythm. Valves stand out prominently. Cervical glands palpable. Thyroid not enlarged.

Chest.—Small, thin, emaciated. Flaring of costal angles. Lagging over upper right.

Palpation.—Define friction fremitus over upper right chest anteriorly. Vocal fremitus well transmitted on both sides anteriorly. Posteriorly vocal fremitus greater on right except at bases where it is almost absent at right base. Vocal fremitus also decreased over left base.

Percussion.—Impaired over right apex anteriorly. Impaired at right apex posteriorly all way to angle of scapula. Dull below angle of scapula. Left lung is resonant everywhere except in lower axilla and posteriorly over base.

Auscultation.—(1) Right apex. Harsh breath sounds with rough crackling rales—increased V. R. Right apex posteriorly shows harsh breath sounds and egophony. Anteriorly the breath sounds are everywhere harsh. In lower axilla and posteriorly they are decreased and distant, few crackling rales, decreased V. R.

(2) Left lung shows harsh breath sounds and increased V. R. everywhere except at base and lower axilla. Here breath sounds are distant; V. R. decreased and there are a few crackling rales.

Heart.—Impulse diffuse and wavy. Apex 6 l i s 13½ cm. M. s. l. P. M. 1 5 l i s nipple line. Pulse deficit 8 in 15 seconds.

Heart sounds are a jumble of disoriented and disconnected sounds. No rhythm at all. Muscular sounds weak.

Blood pressure 80/50.

Abdomen.—Wall thin, edematous and taut. Right inguinal ring patulous and there is a right scrotal hernia with hydrocele. Signs of large ascites—1½-2 gallons were drawn off (paracentesis). After this was done the liver was palpated.

Liver.—4th rib to 14 cm. below right costal margin and 8 cm. below left costal margin.

Spleen.—Tip is palpable.

Extremities.

Reflexes	Right	Left
Biceps	+	+
Triceps	+	+
Abdomen	0	0
Patellar	+	+

Lower part of legs and ankles are markedly edematous.

Genitalia.—Large right scrotal hernia with hydrocele. Edema of prepuce.

Tentative Diagnosis.

1. Cardiac hypertrophy and dilatation.
2. Auricular fibrillation.
3. Old right apical tuberculosis.
4. Right hydrothorax—less in left pleura.
5. Pulmonary congestion and edema.
6. Passive congestion of liver and ascites.
7. Passive congestion of spleen and kidneys.
8. Chronic parenchymatous nephritis.
9. Right direct scrotal hernia.
10. Right hydrocele.

5/16/24. Blood count; Blood chemistry; Wassermann; K. E. test.

Started on digitalis-digalen intravenously.

Peritoneum and scrotum tapped yesterday.

Pleural effusion will be given an opportunity to resolve spontaneously. Much more comfortable today.

5/18/24. Better.

5/20/24. Coughs great deal—probably due to fluid in chest.

5/23/24. Signs of fluid in right chest posteriorly in 6th and 7th interspaces mid-scapular line. Aspiration gave 150 c.c. of greenish serous fluid which was sent over for examination. Temperature has been up for four days and may be due to fluid in chest. Complains of abdominal and thoracic pain when he coughs.

Additional diagnosis: Empyema (right).

5/29/24. Fluid from chest was sterile. Patient will be relieved for present by repeated tappings. Ascites has increased so that it will be tapped tomorrow. Pulse fuller and more regular.

5/30/24. 400 c.c. of pea green thick fluid aspirated from right lower chest.

6/1/24. After aspiration patient was very weak. Temperature came down.

6/2/24. Slight improvement in pulse. Delirious at times.

6/3/24. Pulse slow and of fair volume this morning.

6/6/24. Very weak. Irrational at times. Heart weak, slow, irregular.

Many moist rales at left base (congestion), signs of fluid at right base (empyema). Not much fluid in abdomen. Thighs edematous. Prognosis poor.

6/7/24. Final note: Patient died early this morning.

Diagnosis:
1. Chronic myocardial degeneration.
2. Auricular fibrillation.
3. Right empyema.
4. Chronic parenchymatous nephritis.
5. Right direct scrotal hernia.
6. Right hydrocele.
7. Passive congestion, viscera.

Clinical Laboratory Record

Urine.—5/16/24. Lt. brown; acid reaction; Sp. Gr.—1026; alb.—0; sugar—0; leucocytes occas.; mucus +.

5/18/24. Amber; acid reaction; Sp. Gr. 1025; alb.—faint trace; sugar—0; leucocytes few; mucus ++.

5/19/24. Red; acid reaction; Sp. Gr.—1029; very faint trace of alb.; leucocytes few; mucus +.

5/21/24. Dark amber; acid reaction; Sp. Gr.—1031; alb.—faint trace; leucocytes few; epithelial cells amophates.

5/23/24. Dk. amber; acid; 1032; very ft. trace; occa. granular, sediment ++. K. E. Test 75%-dye given intravenously. (Hyaline occas., leuc. few, mucus ++, epithelial cells few).

Blood.—R. B. C. 41,250,000; W. B. C. 16,200; Hgb. 71; Polys. 92; Lymphos. 6.

5/15/24. Wassermann both antigens negative.

5/15/24. Blood chemistry—Blood sugar 88; blood urea 15; blood uric acid 2.2; CO_2 45 c.c.

Sputum.—5/17/24. 5/19/24. Tub. Bac. None found.

Miscellaneous.—5/15/24. Paracentesis: Effusion culture-smear negative. Culture sterile.

5/15/24. Paracentesis: Effusion—A1, proteins 2%. Smear—no organism found.

5/23/24. Effusion (mic.) appearance (very purulent). A gram + cocci occurring mostly in pairs and occasionally in short chains—pneumo.

Pathological Laboratory; Philadelphia General Hospital. Autopsy No. 8888. Performed by Dr. E. R. Saleeby 6/7/24.

Clinical Diagnosis.—Chronic myocardial degeneration. Auricular fibrillation.

Gross Anatomical Diagnosis	*Histological Diagnosis*
PICK'S DISEASE OR POLYSEROSITIS.	Atrophy. Fatty infiltration.
Heart.—Calcification of the pericardium. Fatty changes of the myocardium. Chr. interstitial myocarditis.	Chr. calcific epicarditis.
Lung.—Right sided empyema. Pulmonary edema.	Pleurisy. Chr. hyaline.
Kidney.—Acute parenchymatous nephritis.	Acute tubulo-glomerular nephritis (early).
Spleen.—Chr. calcified perisplenitis.	Chr. interstitial splenitis.
Liver.—Peri-hepatitis. Fatty changes.	Chr. hyaline peri-splenitis.
	Portal cirrhosis, passive congestion; Chr. fibrous perihepatitis; Ac. fibrino-purulent peri-hepatitis.
	Lymphnode. — Chr. hyaline lymphadenitis.

Cause of Death: Pick's Disease.

External Examination.—Body is that of an adult, white male. Showing marked rigidity and lividity. No external gross abnormalities. There is right hydrocele.

Internal Examination.—Little fluid in the abdominal cavity. All the abdominal viscera are adherent and coated with sero-fibrinous exudate. Thorax: 800 c.c. of turbid fluid, right side.

Heart and Pericardium.—The pericardium is calcified and adherent to the heart. Some of this calcification probably gone into bone formation. Is densely adherent to the myocardium. The myocardium is flabby and shows some fatty changes and increase in fibrous tissue. None of the valve leaflets show any noteworthy lesions.

Lungs.—L. Densely adherent to the pleura and diaphragm, as well as to the pericardium. Cut surface is markedly edematous.

R. Is similarly adherent and collapsed. Shows atelectasis and edema.

Spleen.—Somewhat large. Adherent to the adjacent tissue. The capsule is thickened and calcified. Cut surface is purplish red.

Kidney.—L. Usual shape, swollen. Cuts with decreased resistance. Cut surface bulges. Capsule strips easily, leaving a smooth surface and averted edge. Vessels are injected.

R. Similar to the left.

Liver.—Usual shape. Diaphragm is densely adherent. Cuts with slight increase in resistance. Cut surface is tough and somewhat congested.

Intestines.—Are adherent to each other, and coated with thick sero-fibrinous exudate. No attempt was made to remove them.

Pancreas; Adrenals; Bladder; Ureters.—Negative.

Sections.—Heart and pericardium, lung, liver and diaphragm and spleen. Brain not removed.

Histology.—Heart.—The muscle cells are small, cross striations are lost, nuclei rather pale and irregular in shape. Between the muscle bundles there is a fair amount of fat. Arteries

slightly sclerosed. The epicardium is greatly thickned by fibrous tissue enclosing large and small amounts of degenerated (necrotic) material which is heavily calcified. There is no true bone formation present. A few lymphocytes represent all infiltrated cells. The appearance is not that of an infection process at present.

Kidney.—There is a recent moderate parenchymatous degeneration of the convoluted and collecting tubules with a little serous material in the lumina. A similar trace of exudate is seen in Bowman's space.

Liver.—There is a well developed cirrhosis of the portal type. A distinct rather recent passive congestion is noted. The liver cells seem well preserved. The capsule is greatly thickened by dense, hyaline fibrous tissue. Superimposed on this is a fibrinopurulent exudate, quite recent. Where the two processes touch many degenerated cells, chiefly polys and a little fine calcium deposition are seen. Evidently the area has an unusual affinity for calcium.

Splecn.—The capsule is greatly thickened by hyaline connective tissue in the spaces of which are degenerated cells, some of which are polys. These cells are most numerous about the center of the capsule, and here there is a bluish haze of early calcium deposition. On the surface there is a little fibrin and more cells, chiefly lymphocytes. The pulp shows some hyalinization which on close examination seems to originate in the walls of vascular spaces. In this it resembles amyloid.

Lymphnode.—The node is entirely destroyed save for a little lymphoid tissue about the periphery. Elsewhere is a dense, structureless hyaline mass. At the edges of this mass the hyalinization is seen to originate in the walls of vascular spaces. Endothelial cells appear to be decreased in number as compared to the preserved areas.

Diaphragm.—One sheath and the muscle are apparently normal. The other sheath (probably the lower) has a thick organizing fibrinous exudate. This inflammation apparently is rather chronic near the muscle, but more acute nearer the surface. Endothelial cells are numerous in this section.

An unidentified section shows a chronic organizing inflammation, apparently of some muscular structure. Imposed over this is an intense acute suppurative process with abscess formation.

Of interest in this case is the marked destruction of the serous membranes and apparently of the capillaries in spleen and lymphnode; the marked tendency to calcification in places, and the evidence of acute or subacute inflammation.

Amyloid stain of spleen and lymphnode—negative.

REFERENCES

1. Pick: (Pericarditische Pseudolebercirrhose). Ztschr. f. klin. Med.; Berlin, 1896, XXIX, 385.
2. Krecke: (1905).
3. Rose: Wurzb. Abhandl. a.d. Gesamtgeb. d.prakt. Med., 1904, IV, 137-166.
4. Schupfer: Riforma med., Palermo. Napoli, 1904, XX, 225-229.
5. Verco: Australas. M. Gaz., Sydney, 1901, XX, 364-367, (Polyorromenitis).
6. White: Tr. Clin. Soc. London, 1885-6, XIX, 296-301. (Simultaneous Inflammation of Several Serous Membranes).
7. Cardarelli: Studium, Napoli, 1916-1919, IX, 348-353.
8. Tranquilli: Gazz. di Roma. 1906, XXXII, 533-546.
9. Gilardini: Casuist. med., chir., Milano. 1905, 1, 21-27.
10. Jollasse: Jahrb. d. Hamb. Staats, Krankenanst. 1897-8, Hamb. n. Leipzig, 1900, VI, 227-240.
11. Wata & Faiya: Chingai Iji Shinpe, Tokio, 217-231.
12. Reizenstein,A: Sitzungab. d. arztl. Ver Nurnb. 1905, Munchen, 1906, 20.
13. Index Catalogue Vol. XIV, 1909, Page 3.
14. Gerhardt: Munchen, med. Wchnschr., 1917, IXIV, 1538. (Polyserositis).
15. Rezende: Arch. brasil. de med., Rio de Jan., 1922, XII, 71-85.
16. Sabraze's: Granulobasocytes (Mast cells) of pleurale et P'eritenedle des serosites) Gaz. hebd. d. sc. med. de Bordeaux, 1922, XLIII, 73-79.
17. Dowd: Ann. Surg. 1923, LXXVII, 423-432.
18. Jansen: Deutsche Med. Wchnschr., Leipz. n. Berlin, 1922, XLVIII, 430. Pick's Syndrome (Pericarditic-Pseudocirrhosis).
19. Ernst: (Wurzburg 1904) Polyserositis Productiva.
20. Schulze, Leipzig 1907.
21. Riemer, Kiel, 1908.
22. A. O. J. Kelly: Trans. Coll. Phys. Phila., 1902, 3, s., XIV, 62-102 also Am. J. M. Scs., 1903, CXXV, 116-148.
23. Curschmann: Deutsche med. Wchnschr., Leipz. n. Berlin, 1884, X, 564.
24. Mazzitelli: Studium, Napoli, 1922, XIII, 51. (Friedmann vaccine in polysevositis).
25. Cardarelli: Studium, Napoli, 1923, XIII, 69-74.
26. Mayo, W. J.: Trans. Amer. Surg. Assoc. (Phila.) 1922, XL, 168-176.
27. Pezzotti: Gior. di Clin. med., Parma, 1923, IV, 161, 201.
28. Sabrazes: Granulo-basocytez (mast cells) in polyserositis. Arch. d. mal. du colur, etc. Paris, 1923, XV, 212-222.
29. Zino: Gazz. d. osp., Milano, 1922, XLIII, 854.
30. Tagliavini: Clin. Vet., Milano, 1922, XLV, 287-296.
31. Carusi: (Autoserotherapy) e Polisierosite Med. prat., Napoli, 1922, VII, 140-145.
32. W. J. Mayo: Concato's Disease. Ann. Surg. 1922, LXXVI, 432-437.
33. Neisser: Real-Encyclop. d. ges. Heilk. (Eulenburg) Berlin u. Wien, 1922, III, 224-227.
34. Lamb: Med. Clin. N. Am. (Phila.), 1920-21, IV, 1339-1344.
35. Pansini: Rassegna internaz. di clin. e. terap., Napoli, 1921, II, 226-235.
36. Navarro and Pillado: Semana Med., Buenos Aires, 1920, XXVII, Pt. 2, 24.
37. Maragliano: Cron. d. clin. med. di Genova, 1919, XXV, 17-19.
38. Mosler, Ernst, etc., 1910: Rheumatic Inflammation of the Serous Membranes (So-Called Polyserositis Rheumatica). Medical Press and Circular, 1910, XC, 433.
39. Reid, Wm. D.: Multiple Serositis. Boston Medical and Surgical Journal, 1920, CLXXXIII, 386.
40. Peutz, J. L. A.: Polyserositis. Nederlandsch Tijdschrift v. Geneeskunde, Amsterdam, 1923, 1, 1298, (Abstract J. A. M. A., 1923, LXXX, 1744.)
41. Ewing, H. J.: A Case of Multiple Serositis (Pick's Disease) of Unusual Distribution, British Med. Chur., J., 1921, XXXVIII, 90.
42. Rubinstein, J. L.: Pick's Disease with Report of Case in a Child of Three. Pediatric, 1909, XXI, 81-86.
43. Le Play, A.: Autoserotherapy, Bull. Med., Paris, 1910, XXIV, 707-710.
44. Ameuille, P.: Tuberculos pleurate et tuberculose generalisee des serenses. (Pleural tuberculosis and generalized tuberculosis of the serous membranes.) Ann. de med., Paris, 1917, IV, 56.
45. Foster, N. B.: Demonstration of a case of Polyserositis. J. Mich. Med. Soc., 1917, XVI, 21.
46. Maggesi, B.: Di un rare inizio della polisierosite. (A rare beginning of Polyserositis.) Policlinico, sez. prat., 1921, XXVIII, 1006.
47. Martelli, C.: Ascite epato—pericardica di origine polisierositica. (Hepatopericardial Ascites of Polyserositic Origin.) La Pediatria, 1917, XXV, 89.
48. Chace, A. F.: Report of a case of Polyserositis. The Post Graduate, 1908, XXIII, 356.
49. B. R. Whitcher, A. B., M. D.: Tuberculous Polyserositis with report of a case (From the Department of Pathology and Bacteriology, New York Post Graduate Medical School and Hospital). Boston, Med. & Surg. Journal, October 30, 1924.
50. Ponce de Leon: An. de Fac. de med. Montevideo, 8:691-772, July-August, 1923.
51. Orr-Ewing, H. J.: A case of Multiple Serositis (Pick's Disease) of Unusual Distribution. Bristol Medico-Chirurgical Journal, 1921-1922, XXXVIII-XXXIX, 90.
52. Feitu: Paris Theses, 1820, II, No. 40.
53. Victor Biat: Paris These, 1884, V, 19.
54. Pierre (1825): Paris.
55. Mouroux: Paris These, 1883, No. 417.
56. Scrimger: Nelson's Loose Leaf Medicine, V, P. 394.
57. Nichols: Studies from Royal Victoria Hospital, Montreal, 1902. I, No. 2.
58. Taylor: Brit. Med. Jour. Part II, 1900, p. 1693.
59. Hamman: Med. Clin. N. A. 1919, II, 1747.
60. Evans: Amer. Jour. Med. Sci. 1918, Vol. 45, (155), 553.
61. Nichols: Jour. A. M. A., March 14, 1903, XL, 696.
62. James B. Herrick: Pericarditic Pseudo. Cirrhosis of the Liver. (Trans. Chicago, Path. Socty.), Volume V, Aril 14, 1902, No. 5, Page 71.
63. Reynold, Webb, Wilcox: Treatment of Chronic Universal Perihepatitis. (Trans. Amer. Thera. Society). 1911, Page 141.
64. Kramer: Nederl. Tiydschr. v. Geneesk., Amst., 1917, i, 1654-1660.
65. Sao Paulo F: Brazil-Med., Rio de Janiero, 1917, XXXI, 29.
66. Zelenin, V. F.: Novoye v. Med., Petrograd, 1916, X, 767-782.
67. Antonucci: Policlin, Roma, 1916, XXIII, Sez. prat., 1150-1155.
68. Mosler: Polyserositis rheumatica.—Berlin. klin. Wchnschr., 1910, XLVII, 277-279.
69. Van Suchtelen: Polyserositis. Nederl. Tijdschr. v. geneesk., mst., 1910, XLV, I pt., 1404-1406.
70. Warren: Diagnostic value of mitotic figures in the cells of serous exudates. Arch. Int. Med., 1911, VIII, 648-658.
71. Hager: Polyserositis; Festschrift zur Feier des 50 jahrigen Bestehens der medizinischen Gesellschaft zu Magdeburg, 1889. S 39.
72. Nothnazel: Spec. Path. u. Therap., Intestines and Peritoneum, p. 742.
73. Filotico: Autoserotherapy in T. B. Polyserositis Incurabili, Napoli, 1915, XXX, 385-410.
74. Von Kerekes: Polyserositis: Wien. klin. Wochnschr. 1916, XXIX, 1234.
75.—Marchiafava: Riv. ospedal., Roma, 1916, VI, 445-451.
76. Williamson: Med. Clin., Chicago, 1916, II, 171-174. (Multiple T. B. Serositis.)
77. Chevrier: Therapy. J. de Med. de Bordeaux, 1910, XL, 343-345.
78. Geselschap: Nedri Tijdschr. v. Geneesk., Amst., 1910, XLV, I. pt., 1812-1819. (luchtinblazing.)
79. Heess: Zuckergussorgane: Polyserositis, Munchen. med. Wchnschr., 1910, LVII, 1038.
80. Isler, L. Fibrose Polyserositis-Morbus Bamberger Centralbl. f. d. Grenzgeb, d. Med. u. Chir., Jena, 1909, XII, 697; 732.
81. Courmont: Therapeutics of serisitis. J. Med. franc., Paris, 1910, III, 469-476.
82. Fortier: Autoserotherapy. Bull. med. de Quebec, 1910, XI, 150-156.
83. Moraes: Polyserositis-med. Contemp., Lisbon, 1911, XXIX, 42-44.
84. Arne, Jos.: Lyon, 1914. L. Sezanne. 55 p. No. 113.
85. Rossi: Iodoform in Concato's Disease. Riv. med., Milano, 1910, XVIII, 160-163. Also Gazz. med. di Marche, Ancona, 1911, XIX, I, No. 3, I, No. 4.
86. Hutinel: T. B. Serositis. Clinque, Paris, 1912, VII, 261-266.
87. Matthew: Polyorromenitis or multiple serositis. Edinb. M. J., 1912, n.s., IX, 310-319.
88. Szexzi: Folia haematol., Leipzig, 1912, XIII, 1 Theil, 1-24.
89. Braga and Copelli: Serositis and autoserotherapy. Boll. d. sec. med. di Parma, 1910, 2. s. III, 183-198.
90. Buttersack: Latent circumscribed affections of the serous membranes. Post-Graduate, N. Y. 1910, XXV, 1023-1034.
91. Mosny, Javal and Dumont: Presse med., Paris, 1914, XXII, 477.
92. Ronchetti, V: Case of acute polyserositis. Osp., Maggiore, Milano, 1913, 2. s. I, 661.
93. Di Paola: T. B. Polyorrimenitis. Gior. di med. vet., Torine, 1913, LXII, 795-803.
94. Esau: Polyserositis. Deutsche Ztschr. f. Chir., Leipzig, 1913, CXXV, 155-174.
95. Ferri and Fontaine: Compt. rend. Soc. de biol., Paris, 1912, LXXIII, 673-675.
96. Battaglio: Autoserotherapy. Gior. internat. d. sc. med., Napoli, 1913, n.s., XXXV, 894-897.
97. Cohen and Goepp: Multiple serositis and report of necropsy and remarks on two cases. J. A. M. A., 1914, LXII, 27-29.
98. Hann: Chronic multiple serositis simulating intrathoracic growth. Lancet, London, 1913, II, 1610.
99. Hutinel: La tuberculose de sereuses. Rev. Gen. de clin. et de therap., Paris, 1914, XXVIII, 67-69.
100. JUGHON, A.: Lyon, 1913, 88 p. no. 91.
101. Kieseritsky: Multiple serositis, St. Petersburg. med. Ztschr., 1913, XXXVIII, 369.

(Continued on page 206)

Kraurosis Vulvae*

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Although Weir, Tait, and Herzmann had previously described under various names, undoubtedly the same condition, it is to Breisky, of Prague, that we are indebted for the name of Kraurosis Vulvae, as well as a knowledge of this disease. In 1885, he reported 12 cases, with a careful and detailed study of their pathology and symptomology. A short time following the publication by Breisky, the disease in question, was recognized as a morbid entity. In addition to the name of kraurosis vulvae, this disease has been recognized as similar to the following conditions:—"ichthyosis vulvae, "pruritis vulvae," progressive cutaneous atrophy of the vulva," "vulvar cirrhosis," "leucoplacic vulvitis," "atrophy of the vulva," and "chronic vulvitis.

The parts affected are the vaginal introitus, the vestibue, and urinary meatus. In the earlier stages reddish areas appear surrounding the vaginal and urethral orifices. The spots are very painful on slight pressure. They may appear slightly elevated, but are usually depressed.

Microscopic examination (Breisky cases) by Fischel; showed that the sebacious glands were sparingly demonstrable. The connective tissue was sclerotic, and in many areas a small cell infiltration was found. The Rete Malpighii seemed to be contracted, so that the horny layer was in intimate relation with the papillae. In the later stages of the disease, the skin glands were missing, either in part or entirely. No changes were found in the nerve fibres and no specific organism could be found.

Microscopic examination (Martin's cases) by Orthmann; showed an atrophic condition of the skin, Rete Malpighii remained only in patches, the papillae were flattened out; the corium stretched and sclerosed; many places were infiltrated with small round cells. No sebacious follicles could be seen and very few sweat glands were present. No change could be detected in the nerve endings, nor any specific organism could be found.

Microscopic examination (Reed's cases) by Bettman; he observed that "Anatomical lesions were of a different character according to the stage of the disease. In the beginning the hyperemia and exudation predominated in the tissues, later the lesions consisted of a thickening and shrinking of the tissues in sclerosis."

The etiology of the disease is very obscure. Many investigators regard kraurosis as a dermatitis following a pruritis (Ohman-Dumesnil, Hirst) gonorrhea, masturbation, and syphilis are considered by some observers as probable eitological factor. Kraurosis was reported to have followed the extirpation of the uterine appendages (Olshousen, Reed). It has originated from a cicatrix in a lacerated perineum (Jevonsky). It has occurred at times of menopouse (Longyen, Rouna, authors cases), chronic discharges were attributed as being responsible for the development of this disease (Orthmann). A multiple of other conditions such as pregnancy, rheumatism and furunculosis have been suspected as being eitological factors in the causation of this disease. Another observer believes that the chief cause chief of kraurosis vulvae is an endogenous factor, a neurosis (Gardlund). Chemical irritation may also cause this disease (Heller).

Kraurosis vulvae has been known to occur at an age as early as 18 and as late as 70 years. However, the greater number of cases reported occurred around the menopause.

Much soreness, smarting, and burning pain accompanies this condition. Because of the tenderness of the reddish patches and inelasticity of the vaginal orifice, dysparunea is a very common symptom. Itching is however not constantly present. From the subjective symptoms alone no diagnosis can be made. However, careful inspection, will reveal the sensitive points as well as the scarlet patches surrounding the vaginal and urethral orifices. When atrophic areas are seen, one is very likely to mistake the disease with ichthyosis vulvae, however, in this disease there are adherant scales present, which are never found in a case of kraurosis vulvae.

The prognosis of kraurosis varies. Tait says "that the patient should always be informed that the progress of the disease will extend over years, that it will certainly get well in time, but that treatment from time to time will give relief." Some cases have improved under local treatment, others after excision of diseased part, and still in some the symptoms reappeared after operation, others developed malignant changes. The authors quite agree with Dr. Reed when he states that "he cannot promise recovery to the patient affected with the disease under any circumstances."

Various local measures have been employed in the treatment of the Pruritis. Icthyol ointment (10%); resinol ointment; carbolic acid 1 in 20, painted on parts. Yellow oxide of mercury ointment (3%) rubbed well in parts twice daily, alkaline douches, and silver nitrate (20%) locally.

The foregoing preparations are useful in certain cases while in others they increase the itching. No definite rule can be laid down as to choice of drug. X-ray sometimes gives relief after other measures fail; however in some cases it was proven to be harmful as it produced a severe dermatitis. Herzmann tried to scrape off with a sharp curette the hard tissues involved, but the length of time this method took and the poor results obtained does not commend it.

When the symptoms are severe and not relieved by other measures, then it is best to perform a radical operation and excise the mucous membrane in the form of an elipse and the denuded edges are then brought together by means of interrupted sutures (Reed). A very important factor to consider before operating, is not to do so in the early stage of this disease, as the process is not yet localized and is very likely to spread regardless of operation. As soon as the sclerotic changes are limited then there is no danger of recurrence of this condition after you operate. Martin (reported by Orthmann) began the method of excision as a curative treatment for this condition. Eight cases operated on by Martin completely recovered.

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Report of Two Cases

CASE 1. Mrs. L. G., housewife, age 42, widow 10 years, had three children, all living, youngest 19 years of age. Menopause 8 years ago.

On May 26, 1924, patient came to our clinic (Dr. Cora Ballard's service) complaining of a soreness, smarting, and burning pain in her "privates." Condition began 6 months ago. Patient stated that symptoms described previously began suddenly. She consulted a physician who prescribed a "black salve" for her to apply to affected parts. After employing this salve for about two weeks, patient not feeling any better, decided to go to the dispensary of the New York Post Graduate Hospital.

Patient was examined vaginally, and a number of small reddish patches were seen surrounding the vaginal and urethral orifices. These patches were painful to touch. The vaginal orifice was narrow and just admitted the index finger. The labia minora were apparently fused with the labia majora, and no trace of them could be seen. Urine analysis and Wassermann test were both negative.

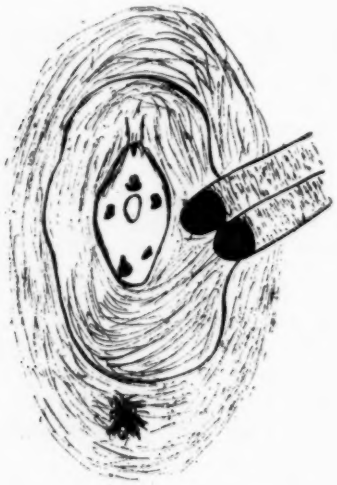

Fig. 1.—Case 1, Mrs. L. G.

Comment

At the suggestion of Prof. T. T. Sweeney, silver nitrate (15 per cent) was applied to the patches to cauterize them, so as to diminish the patient's suffering and also obtain a good cicatricial tissue. However, six months later, this method of treatment did not arrest the progress of the disease, and was therefore discontinued.

Mercurochrome (1 per cent) was then employed in the same manner as the silver nitrate, but here also the condition did not improve. Excision of affected parts was advised, but patient refused to listen to this.

A consultation with Prof. William H. Meyer, of the Department of Roentgenology, as to his opinion of the case in reference to *x*-ray or radium therapy—and he voiced his opinion that these agents, if employed, would produce further atrophy and shrinkage of vaginal introitus; he suggested quartz vapor lamp or Alpine sun lamp therapy. Patient was asked to return so that further studies could be made. Plans were made by the authors to remove a specimen of the diseased patches for pathological diagnosis. The patient noticed the interest she aroused in the clinic, but failed to return. Attempts were made to have the patient come back, but they were unsuccessful.

CASE 2. Mrs. G. D., housewife, age 55, married 38 years, had 4 children, 2 living, first thirty-four years ago, last twenty years ago, two miscarriages (4½ months each). Menopause 6 years ago.

On December 4, 1924, patient came to the dispensary of the New York Post Graduate Hospital (Dr. Cora Ballard's service) complaining of pain in the back radiating to right hip, itching in her vulva, and frequency of urination. Patient stated that her itching began 6 years ago, and she never consulted a physician as to this distressing symptom as she "felt ashamed to do so."

Inspection of vagina revealed scattered patches, pale, and a very thin mucous membrane, atrophic, gray, lustrous, and shrunken. Vaginal examination—vaginal orifice could easily admit three fingers, old laceration of perineum, cystocele and rectocele. Cervix small and atrophic, short vaginal vault. No evidence of labia minora, evidently fused with labia majora. Urine examination was negative.

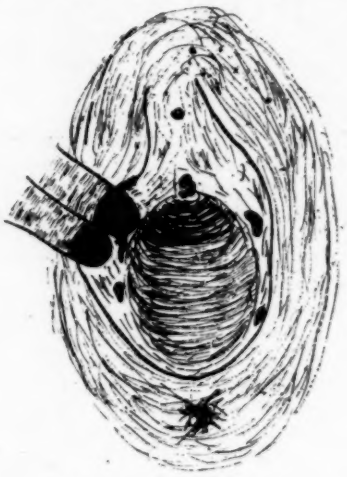

Fig. 2.—Case 2, Mrs. L. G.

Comment

Slightly depressed, due to the loss to us of our first case of kraurosis vulvae, we were somewhat elated to obtain another case of kraurosis within two weeks after our first case refused to return to our clinic. Although this case did not represent the characteristic picture of kraurosis, nevertheless a diagnosis of kraurosis was made, and attempts were made to obtain a specimen of the diseased tissue. After infiltrating the area surrounding affected part with novocoin solution, a small portion of the diseased area was removed and sent to the pathologist for examination.

Microscopical examination of sections of the mucous membrane of the vagina was made in the laboratory of the New York Post Graduate Hospital and Prof. Paul Klemperer kindly sends us the following report:—

Histological Examination

"The surface is formed by stratified squamous epithelium which varies in thickness from 160 to 180 microns. The superficial layer is formed by flattened squamous cells without cornification. The stratum lucidum consists of five rows of polygonal squamous cells. The basal-cell row is very distinct. The epithelial cells are uniform in size and shape and do not show any signs of proliferation. The corium consists of connective tissue which is very poor in cellular elements and which forms in the superficial layers, only flattened papillae. Sebaceous glands cannot be found. In one area near the surface there is a mucous gland. Staining with Weigert's elastica shows a very great number of coarse and fine elastic fibers. The corium contains numerous capillaries and smaller arteries.

The histological picture is that of an atrophic change of the mucosa. Recent inflammatory changes are absent. The finding of a great number of vessel cross sections might, on the one side, be explained by a tortuosity of the vessels. Partly, however, it must be conceived as a previous proliferation of blood vessels. The epithelial covering of the mucosa shows complete absence of any hornification which differentiates this picture from that of leukoplakia. However, the atrophy of the epithelial covering is not very marked."

Prof. Klemperer, as well as the authors, believes that a diagnosis of kraurosis vulvae could not be made simply upon the examination of the diseased tissue. If how-

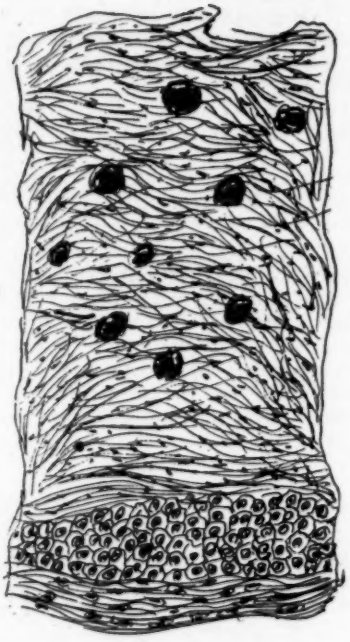

Fig. 3.—Microscopical examination, Case 2 (of excised tissue).

ever in addition to the above findings, certain symptom and signs are present, then a diagnosis of Kraurosis Vulvae could be made with safety.

Conclusions:—

1. In the report of our two cases, the early stage of Kraurosis, as well as the late stage of the same condition was presented.

2. Although dysparunea is a common symptom in this affection, it was absent in both of our cases.

3. Kraurosis Vulvae is a rather rare affection of the external genitals.

4. The etiology as well as the pathology of this disease is a disputed question.

5. Local applications rarely beneficial.

6. Spontaneous cure hardly to be expected.

7. The pathological findings in the cases of Breisky's, Martin's, Reed's, and our own, convinces us that a diagnosis of Kraurosis Vulvae from the diseased tissue alone without the clinical symptoms and signs is an utter impossibility. The authors wish to express their indebtedness to Dr. Cora Ballard and Dr. Paul Klemperer for kind and continued assistance and encouragement.

REFERENCES

1. Albutt, T. C.; Ployfair, W. S.; and Eden, T. W. System of Gynecology, 1906, 416.
2. Breisky, A.; Zeitsch. f. Heilk., Bd. VI, 69.
3. Czempin. Zeitsch f. Geb. u. Gyn., XXLV, 460.
4. Martin, A. Volk klin. Vor. 102.
5. Orthman. Zeitsch f. Geb. u. Gyn., XLX, 283.
6. Breisky, A. Cyclopoedia of Obstetrics and Gyn., 1887, V 10.
7. Berkeley, C.; and Bonne, V.; a guide to Gynecology, 1919, 237, 389.
8. Brothers, A. Repr. Post Graduate, N. Y., 1906, Vol. XXI, No. 3.
9. Crassen, H. S. Diseases of women, 1922, 350-4.
10. Garlund, W. Monatschrift f. Geb. u. Gyn., Berlin, 1919, XLIX, 106.
11. Reder, F. Surg. Gynec. and Obst., 1921, XXXIII, 554.
12. Reed, C. A. L. Diseases of women, 1913, 702-6.
13. Sutton, R. L. Diseases of the skin, 1921, 448.
14. Weiss, J. C. Syphilis, Chicago, 1919, XXXVII, 350.

Posterior Sacral Anesthesia*

(An Improved Technique)

WINFIELD SCOTT PUGH, B.S., M.D.

New York

In reviewing the literature, one finds much confusion, regarding the nomenclature of the various sacral anesthesias. Braun[1] calls his anesthesia of the anterior sacral region, para sacral anesthesia. Lowsley[2] speaks of anesthesia via the posterior sacral foramen as para sacral. Danis,[3] Pauchet,[4] Lemoine[5] and others refer to the retro sacral technique as trans-sacral. Labat,[6] Meeker[7] and others call the same method, sacral block. We believe the word posterior will eliminate confusion, as it definitely locates, the scene of operations without the use of technical terms.

History

Anesthesia of the pelvis by injection of the posterior sacral foramen was introduced by Danis of Brussels in 1913. It was intended not to supplant but to supplement the use of sacral anesthesia, previously conceived by Cathelin and Durant. This method owes its introduction in this country largely to the successful work of Labat, Lowsley and the author's associates at the New York Hospital.

Indications and Contra Indications

What are the indications for the use of this technique? It is indicated in practically all obstetric or gynecological procedures performed through the vagina. In operations on the bladder and the prostate, including prostatectomy by the perineal route. In resections of the rectum for carcinoma particularly by the Kraske, Rose, Hochenegg and Bardenhauer procedures. It is not indicated in operations on the external genitalia, as the penis, scrotum and vulva, as these parts are also supplied by branches from the lumbar plexus.

There are but two contra indications to this procedure as to all local anesthesias. First the absence of one who is skilled in the technique. Second the speed mania. If one is desirous of rushing through his clinic, he might as well avoid regional anesthesia. It is also essential that one adopt a careful and deliberate technique. Sharp scalpels and scissors must be used, as we cannot anesthetize against tearing and great tension.

Preoperative Medication

Our preparatory treatment is essentially that as for all other urologic operations. About 48 hours before operation, the patient is given thirty grain doses of sodii bicarb. If the gastro-intestinal tract is upset a five per cent sodii bicarb solution is given by rectum. Twenty-four hours before operation, he is given a purgative and is allowed to have as peaceful a night as possible before the operation. Poor renal function is a definite indication for deferring the operation. We were formerly in the habit of giving a preliminary narcosis by the use of morphine and scopalamine. We now as a rule seldom find it necessary, except in extremely nervous patients. This type incidentally is not well suited to local or regional anesthesia.

* From the Urological Department (James Buchanan Brady Foundation) of the New York Hospital.

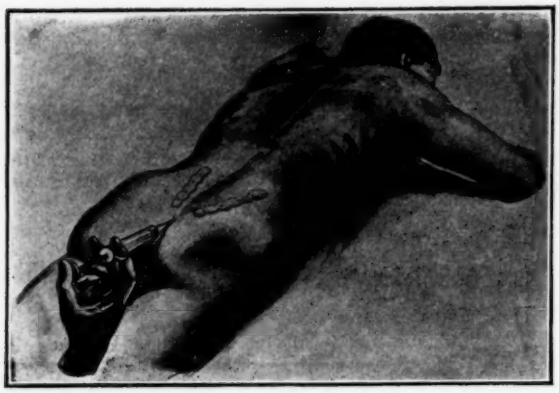

Fig. 1.—Showing proper direction of wheals in posterior sacral anesthesia.

Anesthetic Solutions

We have quite thoroughly investigated most of the so-called local anesthetics. Their various qualities have been carefully weighed, with the result that we have eliminated all except neocaine, novocain and procains. Investigations have informed us that the three above named drugs are identical. We are at present using neocain as recommended by Labat[8] and find it very reliable, always producing a satisfactory anesthesia. It is our experience that the procaines are not so stable as novocain or neocain. The neocain is supplied in capsules containing .50 gms. one capsule in 100 c.c. of sterile water gives 1 per cent solution. We do not use adrenalin in conjunction with the anesthetic. It is believed by Lowsley, Meyer, Schmidt and the author,[9] that adrenalin increases the toxicity of the anesthetic drug. Neither is the addition of sodii bicarb necessary to increase diffusion as noted by Laewen.[10] A one per cent solution always suffices for posterior sacral anesthesia.

Technic of Administration

The patient is placed on his chest and abdomen, with a cushion beneath the pelvis. This lifts the gluteal region and accentuates the boney landmarks. Posterior sacral anesthesia is never used alone, but always in association with caudal injections. We therefore first locate the sacral hiatus, injecting the canal as described in a previous article.[11] If we study a series of vertebral columns, one finds that the posterior sacral foramina are not placed in such a straight vertical line as generally supposed. Each foramen is really placed above and slightly to the outer side of its fellow below. If we draw a line from our point of injection, at the sacral hiatus, upwards and outwards to the posterior superior spine of the Ilium, it will overlie the four upper sacral foramen.

What about the fifth sacral nerve? True this is often injected in the Danis technique, but it is largely superflous, except in operations where the anal border is involved. In making our injections, we usually begin with the lowest foramen first. If the fifth is to be utilized we make a dermal wheal at the junction of the lower and outer border of each sacral cornua. Now following the line between the sacral hiatus and the posterior superior spine of the Ilium, we find each sacral foramen opposite its corresponding spinous process. An examination of many skeletons shows this relation to be quite constant. We find the excellent needles and syringes devised by Labat[12] of great assistance in our anesthetic procedures. We utilize the smallest needle practicable, making our wheel in the corium with a number one needle over the apparent location of the foramen. The injections into the foramen are now made with a six to eight c m needle. Most surgeons seems to be of the impression that al the sacral foramen run in a straight line, toward the anterior surface.

This does not seem to be quite correct. In our experience practically all of the foramen run downward and forward except the third. The direction of this canal seems to be directly anterior in the vast majority of cases.

After penetrating the skin, we feel around with the needle point for the foramen. It is seldom that we fall into them as it were, but with a little fishing they are easily located. If the primary sacral anesthesia has been successful, the foramen injection are not noticed. In some of the articles on this subject varying amounts of fluid are injected into each foramen. We find however that 3 or 4 c.c. will suffice for any of them. 35 or 40 c.c. of the anesthetic fluid is used for the caudal injections and about 40 c.c. for the injection of the foramen. We always recommend that the operation be started in about fifteen minutes from the beginning of the caudal injection.

Fig. 2.—Anatomical structures involved in posterior sacral anesthesia.

We are often asked, do not these patients suffer any after pain, by lying on the injected area? Unless there is slight infection or undue irritation this does not occur. Injection of the posterior sacral foramen is practically without danger. Cases of penetration into the rectum are rare. It is, however, always advisable to observe the same precautions as in caudal anesthesia. That is, see that no blood or fluid oozes out of the needle, before the anesthetic is injected. We know of one case in which the operator on withdrawing the piston, found urine in the barrel. While we only know of this one case, it is worth remembering.

Summary

1. The upper four sacral foramen are located by a line from the middle of the carnua to the posterior superior Iiiac spines.

2. This line overlays the foramen opposite the spinous processes.

(Concluded on page 206)

Technic of Intramuscular Injections

S. M. GELLERT, M.D.,

Portland, Ore.

Intramuscular injections have become so important therapeutically that every practitioner should familiarize himself with a few simple details of its performance. In mercury and in bismuth administration, intramuscular medication has become the standard procedure over other methods. Briefly it offers:

1. A certain method of administering a definite amount of drug.
2. Compels the patient to keep in constant touch with his physician.
3. Induces a desired slow systemic absorption of the drug administered.
4. Under proper control, practically obviates the untoward physiologic effects of mercury and bismuth.
5. Provides more marked serologic and clinic improvement than under ordinary methods of treatment.
6. Induces the average person to take a more complete course of treatment than when drugs are self-administered.

Epifascial injections theoretically may have certain advantages, but to the average operator it seems a hit or miss method, and, therefore, the intramuscular route is preferred.

Those giving numerous injections in time become sufficiently skillful to recognize when the point of the needle is in the fascial plane, but those out of contact with a large clinic will be quite satisfied with the standard intramuscular injection.

It is recommended that on all glass 2 cc Luer syringe be the instrument of choice, using a needle with a 20 to 22 gauge. Two needles are recommended of 1½ to 2 inches in length, depending upon the thickness of the patient's buttock. The needle should have a long sharp bevel; its point should be minutely examined and its lumen be clean and clear previous to every injection. Needles should be frequently renewed even if in apparently good condition, as rusting and corrosion often occur within the lumen, weakening the attachment at the hub. This may result in the needle breaking and becoming lost in the tissues.

One of the essential points to be observed is the choice of a site of injection that will avoid bone, periosteal and nerve structures. In a general way we may roughly divide the aspect of the buttock into four more or less equal quadrants by a vertical and a horizontal line, the most advantageous site being in the outer and upper quadrant at the angle formed by the bisecting lines. This site affords a field where nerve structures may be avoided and where the chances of striking bone or periosteum are reduced to a minimum.

It is needless to remark that strict surgical asepsis should be practiced. The parts should be previously painted with iodine and the syringe and needle sterilized by boiling. Both needle and syringe should be warm while in use and this applies to whatever preparation is used. It often happens that while the syringe is still warm the needle cools, allowing the medicament to congeal in the needle—an error to be particularly avoided.

Depending upon the type of medicament employed the operator should be certain that the suspension is completely admixed by vigorous shaking or stirring, after previously warming. As a rule, suspensions in a thin oily base will require considerable agitation in order to obtain a homogeneous mixture. For this reason preparations having a more solid base will be found of decided advantage and it seems likely that such a suspension will be more thoroughly maintained after its deposition in the muscle, and subsequent absorption will be more thorough and complete. The collapsule preparation of bismuth or mercury in a soft compressible container which is squeezed directly into the warm syringe will be found of decided utility in this regard, saving the operator much time and annoyance and avoiding the necessity of drawing the solution into the syringe through the needle with the added chance of ruining a well sharpened needle point.

Preparatory to injection procedures, the patient is best placed in a prone position so as to secure proper relaxation of the muscles. Contraction of the muscular structures renders the procedure more difficult as more force is required to effect the injection and the increased intramuscular tension tends to force the medication employed back along the track of the needle.

The skin over the site is rendered tense by stretching it between the thumb and fingers of the left hand. This allows the needle to puncture the skin readily and later when relaxed, tends to close and seal the needle puncture.

The syringe is held firmly in the right hand, much in the fashion employed in throwing a dart. The wrist is held more or less firmly and the needle is quickly plunged to its full extent into the underlying muscle by a stroke almost entirely from the elbow. If this movement is used and the syringe is held firmly there will be little danger of breaking the needle in making the stab. It is well in making this puncture to maintain a pressure with the index finger against the piston, so that the agent employed is not deposited until the deep muscular structure is reached. The leakage of a small amount of drug into the areolar or fatty tissues is to be avoided.

After the needle has thus been introduced, traction is applied for the moment to the plunger to determine whether or not a blood vessel has been entered. Evidence of blood in the syringe on aspiration should at once be the signal for a change in site where an additional puncture should be made. Only when this test proves negative may the solution be safely injected. If this precaution is observed there need be little fear of embolus following the injection. After the medication has been slowly injected and the syringe is completely emptied, it is quickly withdrawn and pressure applied with a gauze pad for a few moments over the site of the puncture. This will tend to prevent any back-flow along the needle track and to check any bleeding at the site of puncture. Afterwards gentle massage over the injected area will tend to dissipate the injected solution, will render its absorption more effective, will limit the tendency to node formation, and will lessen the subsequent "soreness."

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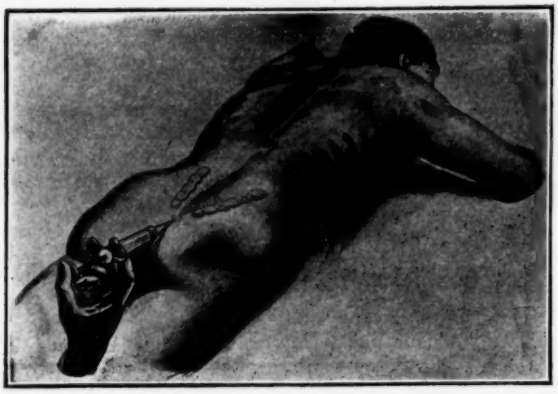

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Surgery

Sacral Nerve Block Anesthesia

W. R. Meeker and A. J. Scholl say that anesthesia of the sacral nerves is entirely satisfactory for most operations that are to be carried out in the field supplied by the sacral nerves. It entails practically no immediate or late risk for the patient, and has been proved efficient and satisfactory. A knowledge of the posterior surfaces of both normal and abnormal sacrums and contiguous bony prominences is necessary in order to employ sacral anesthesia successfully. The size of the sacral hiatus is variable. The normal sacrum is made up of five vertebra. The number of foramina to be injected varies with the number of segments. Palpation of the bony prominences gives the most accurate knowledge of the location of the sacral hiatus and foramina. The posterosuperior iliac spines are the most readily accessible bony prominences and they usually bear a constant relationship to lateral foramina.

In certain cases in which the operation is to be performed in a field supplied by the lower sacral nerves, a single injection of novocaine in the sacral hiatus is sufficient. In the majority of cases the lateral foramina and the contained nerves, as well as the sacral hiatus, were injected, inducing immediate anesthesia which is satisfactory in practically all cases. A one per cent. solution of novocaine, to which was added a small amount of epinephrin, was employed. Our experience has not indicated that the combination of other salts with the novocaine results in a more satisfactory anesthesia.

Sacral injections for therapeutic purposes were carried out in the treatment of nervous conditions, and a proportion of cases of sciatica were difinitely improved, but they were of very little practical value in the treatment of urinary disorders such as incontinence and enuresis.

In obstetrical cases sacral anesthesia has proved satisfactory in reducing the perineal pain incident to the passage of the child, and it also permits a satisfactory relaxation of the perineal muscles, which greatly reduces the tendency to tear. Obstetrical operations and manipulations may be painlessly performed under this anesthesia.

Anesthesia of the sacral nerves has proved satisfactory for most surgical procedures on the pelvic floor and viscera. It is especially satisfactory in urologic cases. The mortality following operations on the bladder, prostate and rectum is markedly reduced in cases in which sacral anesthesia is employed. In urological survey many patients are encountered having a reduced renal function. Sacral anesthesia, which in most cases does not increase the work of the kidneys is especially desirable.

Cystoscopic examinations and urethral and bladder manipulations may be readily carried out under sacral anesthesia. Small contracted, infected and malignant bladders may be dilated sufficiently to make a complete, unhurried examination without discomfort to the patient. A single injection in the hiatus sacralis is sufficient for the majority of cystoscopic examinations and manipulations.

Undesirable complications and sequelæ are exceedingly rare following sacral anesthesia. In no case did any permanent or lasting trouble develop.—(*Annals Surg.*, November, 1924.)

Metastatic Carcinoma of the Pleura

Henry M. Feinblatt of Brooklyn observed that this case is of interest because, in the light of a history of carcinoma of the breast, the discovery of clusters of cells of malignant type in the sediment of a centrifuged specimen of pleural fluid, facilitated the diagnosis of metastatic carcinoma of the pleura.

Case. The patient, a married woman, forty-three years old, Hebrew, childless. In 1920 she had a tumor of the left breast, which was accompanied by paresis of the left hand without sensory disturbances. Wasserman negative. In August of that year complete resection of the breast and axillary glands was performed. Thereafter the patient received *x*-ray treatment over the left lung for a period of six months. She gained in weight and enjoyed good health until August, 1923, when she began to suffer from cough and a sensation of pressure in the chest. Except for the presence of crepitant râles at the right base, examination was essentially negative.

Radiographic examination, with the patient in the horizontal position, showed a complete uniform veiling of the entire right pulmonic field, which, when the patient assumed the upright posture, showed the lower two-thirds of the pulmonic field to have a similar uniform veiling bounded above by a crescentic line, convexity outward, with the upper third of the pulmonic field showing normal illumination and structural detail as compared with the opposite side. The left pulmonic field showed no tissue density changes suggestive of a metastatic new growth process.

Conclusion: There was a considerable quantity of free fluid in the right pleura.

The chest was aspirated, and clear, amber fluid was withdrawn. A few red cells and many endothelial cells were present in the sediment of a centrifuged specimen. A portion of the sediment was treated with formalin, embedded in paraffin, sectioned, and stained with eosin and hematoxylin. Culture of the fluid was negative. One week later the patient died suddenly of asphyxia while in a sitting posture. Permission for necropsy could not be obtained.

Attempts to establish a diagnosis of malignant disease from the character of cells found in the pleural exudate date back to Quincke's report in 1882. Warren in 1911, from a comprehensive review of the literature, to which he added three authenticated cases of his own, established the conclusion that very many cells undergoing mitotic division in serious exudates are almost diagnostic of malignant disease, that a small number of such figures is suggestive of malignant disease but is of no certain value in diagnosis, but that in the majority of exudates with malignant disease no division figures are seen. Powell and Hartley state that when the pleura is involved in malignancy, there may be observed cells of large size and irregular shape, often vacuolated in appearance, and with the nucleus pushed to one side, so as to resemble a signet ring. The small number of mitotic figures found in the present specimen would place it in the category of one suggestive of malignancy of the pleura while the antecedent history is such as to confirm the diagnosis.

It is a fact of considerable interest that, whereas the primary lesion was in the left breast, the right pleura was the one involved, and the left side of the chest was apparently free. It will be recalled that after the breast removal the left chest was intensively treated with *x*-rays for a period of six months. Keeping in mind the experiments of Murphy, Maisin and Sturm, it appears that the intensive raying of the left side of the chest might have produced a state of local immunity. These authors in 1923 showed that autografts from spontaneous cancers of mice, when replanted into areas previously exposed to an erythema dose of *x*-rays, failed in the majority of instances (71.4 per cent.), while similar grafts into untreated areas grew in a large proportion of the animals (83.6 per cent.).—(*N. Y. Med. Jour.*, May 20, 1925.)

Gastro-Enterostomy

J. C. O'Day of Honolulu, gives this technic of operation.—The rent in the transverse mesocolon is made parallel to the transverse colon instead of at right angles to it, and the stomach is allowed to herniate until the vessels of the lesser curvature have been brought into view. The rent is best affected by tearing gently with the fingers, for in this way adjacent vessels will be drawn intact to the lateral margins and conserved, while at the same time the artery colica media is protected against the likelihood of injury.

With the posterior wall of the stomach thus exposed, the lower margin of the rent may be tacked to it by three or more interrupted sutures. The traction loops, penetrating the four coats of the gastric wall, are then placed in such fashion that toward the greater curvature surface sufficient to fuse the half of the jejunum's circumference will be insured.

The jejunum is then sought and brought forward in the usual manner, and when the duodeno-jejunal junction has been identified, the no-loop portion is made to parallel the line of the traction and then rotated downward until its mesenteric border becomes adjacent to the stomach. Just above this mesenteric border of the jejunum the second pair of traction loops are placed, but it is well to bear in mind that, owing to the valves of Kerkring (plicæ circulares), the jejunum, at rest, especially at its no-loop portion, is so contracted that unless the loops be placed closer together than they had been in the stomach, equidistance will not obtain when the two viscera are drawn together for stitching. The loops in the jejunum should be no farther apart than the two-thirds of the distance between those in the stomach.

By gentle traction, the assistant then draws two ridges of the viscera together; thru these the sero-muscular line of suturing is carried. Beginning about the half of an inch outside the loops, the stitching is carried toward and between them. When finally it emerges from between the second pair to a point about the same distance beyond, each set is tied snugly over the seam. The needle is put aside, still threaded, until the finishing stitch of the anastomosis is to be made.

The second suture will include all the coats of both stomach and bowel. It is placed in the following manner: The needle is plunged into the jejunum about a third of an inch away from the first row of stitching. With its point within the lumen it is turned toward the stomach to emerge at a point about midway to the seam, then over the seam to enter the stomach and then

out from the stomach at a point directly in line with the point of which it first entered the bowel. A tie will draw two distinct welts in each and facilitate the completion of this second or thru-and-thrue line of suturing.

Like the first, the third suture line is scromuscular. When it has been completed the opening into the two viscera is made. Mucosa of stomach and that of jejunum approximated along the crest of the damper completes it. From this point on the operation is completed as it is in the clamp operation with but two rows of suturing. Beginning at the opposite angle from which the first line was started, a thrue-and-thrue stitch is carried to the point at which the first needle was put aside. Here again it is taken up and buries the stitch just taken beneath a sero-muscular one across to the point where a free and designates its beginning. A knot with the free end completes the operation.—(*Am. Med.* May, 1925.)

Partial Gastroenterostomy

W. W. Babcock, says that primary gastrectomy for peptic ulcer, while often a tedious and difficult operation, has a low primary mortality, comparing well with the mortality of other radical methods for treating ulcer. The convalescence after partial gastrectomy is, as a rule, as smooth as after a simple gastroenterostomy; and there is reason to believe that the secondary morbidity of partial gastrectomy, especially for gastric ulcer, is less than from gastroenterostomy with or without local excision.

Partial gastrectomy for ulcer is yet in the developmental stage and the best method of resection remains to be determined. Sufficient development has been obtained, however, to warrant the large replacement of other operations now done for gastric ulcer by gastrectomy.

For duodenal ulcer, at present, the field of partial gastrectomy may be considered more limited; however, for certain forms of duodenal ulcer not amenable to treatment by gastroenterostomy, partial gastrectomy is the operation of choice. For recurrent ulcer or jejunal ulcer following gastroenterostomy, partial gastrectomy is most valuable. As gastroenterostomy tends to make a well person sick, a partial gastrectomy should not incorporate its physiologic errors. The most physiologic type of partial gastrectomy is a modification of the Billroth I, and every effort should be made to develop this into safe, reliable operation. Gastrectomy marks a developmental phase in the evolution of gastric surgery, and its disadvantages are such that we should aim to supplant it as soon as possible by better operative methods. Thanks to our inventive surgical bellwethers, surgery of the stomach remains quite traumatic. Fasten a leaders name to any bruising, crushing, burning device and it will soon be found in clinics throughout the land. Besides the stomach, only hemorrhoids are now treated with equal surgical brutality.—(*Am. Jour. Obst. & Gyn.*, No. 4, 1925.)

The Best Single Sign of Surgical Anesthesia

To one administering anesthetics daily, the task soon becomes of a nature so automatic that one is tempted to suspect that there is a single factor upon which the administrator chiefly depends for guidance as to the depth of anesthesia. The experienced anesthetist during a narcosis exhibits the anesthetic in greater or lesser quantities without any apparent close study of the patient. He can and does give certain anesthetics in the fluoroscopic room, in an almost absolute darkness, without any trepidation. He can walk into an operating room in which an operation is in progress and almost instantly state the depth to which the patient is anesthetized. What is the factor from which proceeds this ability?

The anesthetist who has given the matter any thought will state that the sense he employs most during the administration of a narcosis is that of hearing. In the dark room this is the only one available. It follows that the only application of this sense is to the breathing of the patient, which is easily audible in the stage in which operations are performed. What, then, is the particular feature of the breathing which holds the attention of the administrator? Very briefly it may be explained in this way:

In normal breathing expiration is somewhat longer than inspiration, and the pause at the end of expiration is decidedly longer than that at the end of inspiration. When surgical anesthesia is well established, inspiration becomes equal in length to expiration and the pauses at the end of each, while almost negligible as to length, are equal. Such breathing constitutes what is commonly known as automatic breathing. As narcosis lightens, the pause at the end of expiration becomes longer, the breathing otherwise being practically unchanged. In every light anesthesia there is, then, a decided pause at the end of expiration. Such breathing resembles closely that of sleep and differs from normal breathing chiefly by its greater depth. It is, then, by mentally comparing the breathing present at any time with the automatic breathing that one arrives at the depth of narcosis.

In other words, it is the relative length of this pause at the end of expiration that the anesthetist notices and it is upon this that he acts, in time almost unconsciously.

There are other features of the respiration such as regularity, increase in rate and depth, which, while characteristic of anesthesia, do not necessarily indicate that state, as they are found together in other conditions, such as exercise. There are also other contributory signs but this is the one used most in daily practice. One might sum up by stating that the shortening up or the dissappearance of the pause at the end of expiration is the cadinal sign of anesthesia.—(*Canada Lancet*, June, 1925.)

Appendicitis in Children

Appendicitis is a disease which derives its fiercest activities from the means which are taken to treat it says G. V. A. Brown of Detroit. The acute spreading peritonitis is rarely if ever, the result of an untreated disease. It is the administration of aperients which transform a simple disease into one of the more serious type. Lower in his paper says, "The appropriate treatment of severe acute cases, which includes faithful application of the Ochsner treatment, plus the Alonzo Clarke treatment for peritonitis, plus large hot packs over the abdomen, plus hypodermoclysis, reduces the mortality rate to a minimum."

I believe firmly that the serious character and terrible fatality of this disease is due very largely, if not exclusively, to the measures which are directed to the relief of those earliest manifestations of the disease. A few hours after the aperient is swallowed, the patient is seized suddenly with a new and more intolerable agony, vomiting occurs, the abdominal wall becomes rigid, tenderness spreads rapidly across the lower part of the belly, and at last is everywhere present; the pulse rises steadily, and all the signs and symptoms of an acute peritonitis are ushered in without delay. When an operation is performed, a gangrenous appendix, very probably adherent near its attachment to the cecum is found, and the peritoneum already extensively and severely attacked by an acute inflammatory process, replies to the insult by poring out freely, a thin, clear, sterile, and actively bactericidal fluid. The only exception, in which delayed operation is justifiable and advisable, is where the patient is seen upon or after the third day's illness, presents vomiting, general abdominal tenderness, absence of peristalsis, marked abdominal distention, slight cyanosis, with rapid pulse and a dry coated tongue. In such cases, operation is attended with great risk so that the better plan is to place the little one on the combined Murphy-Ochsner-Fowler-Alonzo Clarke-Crile method of treatment.

As to the operation itself, neither the method of approach nor the question of drainage can be formulated by will. However, it can be said that drainage is not needed in cases which show a small amount of turbid fluid without odor. Actual pus should of course, be drained. An abscess localized in the right iliac fossa, is preferably opened by an oblique incision placed near the anterior superior iliac spine, disregarding the muscle fibers, opening the abscess cavity well to the outside. Thus the general peritoneal cavity is not opened and the lower portion of the ileum does not come into the field of operation. Rarely, a hernia may result from this incision, but lives will be saved.

In dealing with the treatment of appendicitis in childhood, the effects of the disease on the female pelvic organs are to be considered. In young girlhood, the infection must be regarded not simply with reference to the diseased appendix itself, but to the serious harm which it may exert on the pelvic organs if left to work out its own destiny in a state of chronic inflammation. Early operation is therefore indicated in children when there is any suspicious evidence of appendicular infection. In the acute stage, the appendix should be removed immediately to forestall if possible a secondary involvement of the adnexa. If pus is present, every effort should be made to drain the pelvis, it being feasible in certain cases to drain the pouch of Douglas through the vagina. Excepting in cases of localized abscess, it is advisable to make a median line incision in order that the pelvic organs may be inspected and that any abnormalities of position or plastic adherence may be remedied by a proper surgical procedure.

POSTOPERATIVE TREATMENT

The simple cases are properly fed, otherwise, "let the patient get well himself." The postoperative cases of peritonitis should receive the same careful nursing treatment as before operation or those where operation is deferred. Except that Fowler's position should be maintained for only a day or two, the crowding of the intestines down in the pelvis in this position favors obstruc-

tion which together with subdiaphragmatic abscess and secondary abscess stand out more prominently as postoperative complications than among adults. Otherwise, the complications following operations in infantile appendicitis are the same as those incident to any abdominal operation in the adult. When intestinal peristalsis has returned as evidenced by auscultation and passage of flatus, enteroclysis is discontinued, and fluids may be given by mouth. Drainage should not be removed too early. There is no hurry. "Better let the drainage rot out than remove it too soon" (Deaver). It may be laid down as a rule that the only proper treatment for any grade of appendicitis, no matter what the age of the patient, is removal of the appendix.—(*Am. Jour. Obst. & Gyn.*, April, 1925.)

Folk Medicine

Folk Medicine

Dr. John N. E. Brown, one-time Medical Health Officer of the Yukon Territory, writes most interestingly on the subject of domestic medicine. He divides it into four classes: The consideration (1) of herbal remedies; (2) of remedies gotten from the animal kingdom; (3) of mineral remedies; and (4) of charms.

In the early days of this country doctors were very scarce. Many settlers got on without them; others sent for them only when the patient was real ill or *in extremis*.

As time went on, however, disease began to increase. First there was the ague and the common cold and its complications and sequel, dyspepsia and bilious fever, inflammation of the bowels, mentioning only a few of the complaints. Then, as outsiders came in, they brought with them measles, scarlet fever, and the various other communicable diseases, which are only of late years being successfully coped with. The so-called degenerative diseases of the heart, arteries and kidneys, and the diseases of defective metabolism, such as diabetes, began to markedly increase, with the advent of too good and too fast living.

Our pioneers possessed only a rudimentary knowledge of disease and its treatment; their therapeutic armamentarium was very primitive. From the Indians they picked up knowledge of certain drugs; and, as time went by, one family conveyed to another some special information it had obtained of certain disease with which it had been afflicted. As a result of this mutual interchange of knowledge a body of empirical lore became a common possession of the community.

It has been the privilege of the writer to secure from various sources lists of some of the plants—indigenous and exotic—and of other remedial agents, which have been used, and are still being used, both in country and town for the alleviation of sickness and "complaints" of various sorts.

Blue Cohosh. Papoose root (*caulophyllum*).—The Indians used to administer the root of this plant to women in childbirth when labor pains were weak and inefficient. It was also given for spasmodic after-pains, and for painful menstruation, in five to twenty grain doses.

Barberry Bark (*Berberis Vulgaris*).—A bitter astringent and in large doses a cathartic. Used locally for inflammation of the conjunctiva. Prescribed for dyspepsia, diarrhea, gallstone, and also for struma and syphilis. Its action in the two last-named diseases is that of an alterative—a medicament which produces a favorable change in the processes of repair and nutrition.

The May Apple belongs to the same family as the Blue Cohosh and Barberry. Seven grains of the powdered root would stir up a sluggish liver, and proved an effectual remedy in constipation and in catarrhal or malarial jaundice. In proportionally smaller doses it was given to children suffering from diarrhea due to the action of indigestible food.

Balm of Gilead (*Populus Balasamifera*).—The closed leaf-buds were collected by our grandmothers who expressed the soft fragrant resin from them; mixed it with lard, heated and strained. A very soothing and healing ointment for "wounds, bruises, and putrefying sores."

Blood Root (*Sanguinaria Canadensis*).—Our forefathers collected the rhizomes and roots which were dried by hanging from the rafters or kitchen ceiling. A decoction was used for gargling the throat. Powdered, the root was dusted on foul ulcers and proud flesh. It was also used as a strenutatory; inhaled, it made one sneeze. Internally it was given in two-grain doses. It was discovered to have anaphrodisiac qualities.

Dandelion. The old doctor book says: "Take four ounces of the fresh leaves, bruise them and place in a pot containing one and a half pints of water. Boil to one pint. Give freely for torpidity of the liver, costiveness and dropsy."

Elecampane was used for coughs and colds.

Wormwood (*Artemesia Absinthum*).—Half a drachm of the dried leaves and flowering tops was made into an infusion and given to dyspeptics.

Tansy (*Tanacetum*).—The leaves and flowers—an ounce to the pint of boiling water—made an infusion, which was given in dessertspoonful doses as an aromatic bitter. Given on an empty stomach, followed by a purge, it acted as a vermifuge. It was and is known best among the laity as an abortifacient; but its virtue (?) in this respect is not manifest unless given in large enough doses to endanger life. In such doses it acts as a narcotic poison.

Another composite flower, Purple Boneset (*Eupatorium perfoliatum*) bears the name of Joe Pye, an old Ohioan botanist. It was dedicated to Eupator Mithridates, who is said to have used the European species in medicine. The name Boneset was given to it because of its alleged power to relieve pain in break-bone fever (Dengué). The old-timers infused the dry-leaves and flowering tops for remittent fevers, and colds, since it induced perspiration. It was prescribed in certain forms of dyspepsia and in debility for its tonic action.

The first and foremost member of the Mint family was the very popular catnip. The dried leaves and flowering tops infused with boiling water, was a sovereign remedy for the stomachache, colic, cramps, and flatulence of childhood.

Another mint, the Skull-cap (*Scutellaria lateriflora*) was used as a calmative in nervous conditions—restlessness tremors, hysteria, epilepsy and hydrophobia. A Toronto nurse told me of its being used in a home she visited recently.

Hoehound (*Marrubium vulgare*).—An ounce of the fresh herb to a pint of boiling water was taken as an infusion for colds.

Sage (*Salvé officinalis*) a mint. Tirty grains of the powdered leaves infused in a cupful of boiling water was a dose in febrile conditions where sweating was execssive. Valuable in the night sweats of consumption. A stimulant, tonic, astringent. Valued as a fargle in chronic sore throat.

Penny Royal.—Also a mint. Two drachms of the dried leaves and flower tops infused in a pint of hot water made a simple remedy in flatulent colic and suppressed menstruation due to cold. An overdose of the oil has been known to cause death by narcosis when taken to produce an abortion. The odor of the oil is extremely obnoxious to insects. Hence it has been called Fleabane. One part of the oil to nine of alcohol made a useful application to prevent the intrusion of mosquitoes.

Senna.—This useful home remedy is a member of the pulse family. The leaves contain glucosides, cathartic acid, sugar and chrysophanic acid. Dose, one drachm. Usually administered in the form of an infusion—senna tea—as a laxative.

Corn Silk of the Grass family.—The fresh stiles and stigmas of Indian corn were the parts used. A cupful of the infusion (1 to 8), repeated as often as needed, was a favorite old-time medicine for incontinence of urine, gravel, gout, rheumatism, and cardiac dropsy.

Grape. The Vine family.—A few weeks ago a white passenger in a train out of St. Thomas, seated next an Indian, was accosted by the latter, who inquired what was the cause of his swollen face. The passenger repliled that he was a sufferer from poison ivy infection. Whereupon the Indian prescribed a decoction of young leaves of grape. The remedy relieved the man.

Ginger, Banana family.—The fresh rhizome is called green ginger. The dried rhizome with the epidermis intact is called black ginger; while the black without the epidermic is named Jamaica ginger. Its active principle is a soft, acrid, aromatic resin and a pungent volatile oil. Dose, fifteen grains. In domestic medicine it is given in the form of a tea, as a stimulant, and carminitie, for abdominal cramps and flatulency; also for suppression of the means resulting from cold. It is also a stomachic tonic in small doses.

Iris. Blue flag.—Parts used; rhizome and roots, which contain an acrid resin, fixed oils and an alkaloid. Five to twenty grains of the powederd root made a dose; and it was administered for constipation and dropsy. I have been informed that the Wake Robin and Pond Lily were used in the early days; probably in much the same way and for the same purposes as the Iris.

Linseed.—Contains fifteen per cent mucilage, and thirty to forty per cent of a fixed oil. An invaluable old home remedy, and still extensively used. Three drachms of the seeds with ten ounces of boiling water made the infusion. Decorations of varying strengths were also frequently given. Dose *ad libitum*. Given in bronchitis and cystitis; but its chief use for poulticing. Linseed oil with an equal quantity of lime water—known as carron oil—has long been a favorite application in burns.

Elderberry.—An infusion is made from one drachm of the

flowers to a pint of water, taken as a laxative. In large doses it acts as an emetic. The inspissated juice used to be used as an alterative in rheumatism and syphilis. Elder-flower water was a popular eye-wash.

Stramonium, Datura, Thorn Apple.—It contains hyoscyamine, scopalomine and atropine and three minor ingredients. It has a marked effect on the sympathetic nervous system, being sedative, antispasmodic and hypnotic in its effects. Hence, the value of the smoke of the burning leaves, inhaled by asthmatics when the paroxysm comes on. It gives immediate relief.

Lobelia.—Indian tobacco. This valuable remedy was used by the Indians, taken up by quacks and irregulars and later by the regular practitioners. The dried leaves and tops were used—collected after the capsules were inflated. The dose internally was two and a half grains. The active principle, lobeline, resembles nicotine in its action. Lobelia proved a very dangerous remedy. In solution it used to be applied to the skin poisoned by Rhus Toxicodendron. Its chief use, was in asthma and bronchitis as an antispasmodic; and it is still widely used for these distressing conditions.

Mullein.—The chief constituent of this conspicuous friendly herb is a mucilage found in the furry leaves. Four ounces of the leaves infused in a pint of milk made a dose; and administered three times daily was a favorite remedy among the Irish for affections of the lungs. It palliated the cough and rendered expectoration easy. It was so used in cystitis and irritable conditions of the bladder. In the form of an enema it was given for dysentery. The leaves were commonly made into a poultice and applied to remove the pain and discomfort of piles. The dried leaves used to be smoked for aphonia and asthma. Action; demulcent, emollient and anodyne.

Plantain.—This common wayside plant was introduced into this country from England. The Indians called it the White Man's Footstep. The pioneers pounded the leaves, expressed the juice and imbibed it for bee-stings. The bruised fresh leaves or the dried ones were applied to bleeding surfaces to check hemorrhage.

Pumpkin.—The seeds decorticated or swallowed with the husks on were a sovereign remedy for tape-worm. In case the outer coat was removed, the practise was to make the remainder of the seeds into an emulsion by triturating them with sugar and water.. The expressed oil was sometimes preferred. In half-ounce doses it was equally efficacious in dislodging from the comfortable interior of his human host this terrifying invader. Administered on an empty stomach, it was followed in a few hours by a brisk cathartic.

Quince.—Two drachms of the seeds boiled in a pint of water for ten minutes and strained made a useful mouth wash for thrush, and a gargle of inflamed conditions of the throat.

Red Raspberry.—An infusion of the leaves—an ounce to the pint of water and boiled, acted as an astringent in diarrhetic conditions.

Blackberry.—An infusion of the rhizomes was useful in cholera infantum.

Juniper.—One ounce of juniper berries infused in one pint of boiling water used to be given when the urine was scanty; or when the kidneys were supposed not to be acting properly. It is a stimulant to these organs and to the skin and heart.

Hemlock.—Hemlock tea was popular in many homes as a children's medicine, which they bore well, though a dangerous remedy. Mothers gave it for St. Vitus Dance; and older people, suffering from shaking palsy, nervous excitement, delirium tremens were given it. It was reputed to allay the pain of cancer. A vapor of the oil is highly spoken of as a palliative for cough due to tickling in the air passage.

Sumach,—Part used; the dried fruit. An infusion was made by adding an ounce to the pint of hot water. Used as an astringent gargle and a wash for ulcers and wounds.

Sassafras.—This was the great blood purifier, especially in conjunction with sarsaparilla and guaiacum. Sassafras tea, made from the bark, was given to pale, pimply-faced people, and others supposed to be suffering from vitiated blood. The infusion was applied locally to ameliorate the burning and discomfort from infections of the skin by poison ivy.

Slippery Elm (*Ulmus flava*).—A small tree rather scarce. The inner bark contains a mucilaginous substance, six parts of which added to one hundred of water and allowed to digest for an hour and strained—always freshly made—is a very valuable medicine for diarrhea and for catarrhal inflammatory conditions of the urinary tract. Its main use was and is, however, in the form of a poultice as a soothing application in all sorts of inflammatory swellings. It was formerly used to dilate fistulæ and strictures.

Tea.—In addition to its well-known stimulating qualities, and its efficacy in relieving certain forms of headache, tea had a local use; the cold boiled leaves were a popular application to inflamed eyes. Their virtue lay in the astringency of the tannin they contained and in the sterility of such a dressing.

Vinegar.—One of the old doctor books states that "vinegar is a useful medicine, both in inflammatory and putrid disorders. Its effects are to cool the blood, quench thirst, counteract a tendency to putrefaction and to allay inordinate motions in the system. It promotes the natural secretions and, in some cases, excites copious sweating." Vinegar mixed with honey or sugar is a common home-made remedy for coughs and colds.

Honey.—Half a drachm of borax mixed with half an ounce of honey is a favorite mother's remedy for babies with canker of the mouth. Honey is a popular ingredient of gargles, fluctuses and cough medicines. For colds it was and is often given with vinegar or lemon juice. Honey is a nutrient, a laxative and an emollient.

Skunk cabbage (*Dracontium Fetidum*).—A stimulant and nervine.

Chamomile (*Anthemis Nobilis*).—The flowering tops contain a volatile oil, camphor and a bitter. An infusion was prescribed as a stomachic tonic; large doses acted as an emetic. External fomentations were used for colic.

Burdock (*Lappa Arctium*).—A decoction of the dried root was prescribed for rheumatism, gout, catarrh of the respiratory passages and for chromic affections of the skin. It was also extolled as an external application for inflammatory swellings, piles, and chronic ulcers. Burdock contains tannin, sugar, mucilage, resin, volatile oil and a bitter.

Turning from a consideration of remedies belonging mainly to the vegetable kingdom, we turn to some of the mineral home remedies.

Baking Soda.—Taken in doses of a few grains up to a small teaspoonful—many folks take soda for heartburn and flatulence. In solutions of a teaspoonful to a pint it is used as a gargle and nasal douche for catarrhal conditions of the nose and throat. The dry powder makes an efficient application in burns; and a solution in water is a common remedy for hives.

Magnesium sulphate.—Another household panacea. Its aperient qualities are so well known as scarcely to need mention.

Common salt.—Used in the strength of a teaspoonful to a pint of water—salt is used as a mouth and throat wash. It is sometimes used as a laxative. Hot salt bags were often applied to inflammatory swellings to relieve the pain and congestion.

Sulphur.—Blown into the throat of a child suffering from diphtheria or quinsy; sulphur used to be quite widely used.

Coal oil.—Kerosene was and is still used in oil-bearing districts as a sort of cure-all, and is in fairly common use in other parts of the country. One of its commonest uses was as an embrocation in rheumatism, lumbago, neuritis and the like. Later it came to be used as an application to the scalp in dandruff; also for *pediculis capitis*. Internally it was given for tapeworm—in small doses.

Dr. R. H. Green, of Embro, Ontario, sends me the following formula for a liniment used in his district; sulphuric acid, spirits of turpentine, and rectified spirits—of each one ounce; add sixteen ounces of chamber lye.

Skunk oil was recommended by certain old medical wiseacres for its curative properties when applied to rheumatic joints, and was quite extensively employed in the olden time. —(*Canada Lancet*, June, 1925.)

Intramuscular Injections

(Concluded from page 193)

and needle, without the necessity of cutting down upon them. These are rare occurrences, however, when careful attention to technical details have been observed. Rarely a pulmonary embolism may follow the injection. This is manifested by a cough and may be accomplished by slight temperature. As a rule, the condition is not alarming and readily resolves.

The following points might again be emphasized:

1. Observe rigid asepsis.
2. See that a proper site is selected.
3. Be careful that no medication is deposited except in muscular structure.
4. See that syringe and needle are warm.
5. Be certain that the suspension is thoroughly admixed.
6. Use a sharp needle.
7. Make sure that the needle has not entered a blood vessel, by aspiring before injecting.
8. Apply pressure and massage to the injected area following the injection.

Public Health

A Phase of Health Economics

A survey of the economic phases of the value of investments of health, one must recognize that long term fresh air homes are operated at a lower cost than those which are changing their population at short intervals. The per diem costs vary from sixty cents to one dollar and sixty cents for each child. If it costs approximately twenty-five dollars for an organization to send a child to the country for two weeks, and the twenty-five dollars must be gathered from public appeals, it is not unfair to ask, does the public, thru the child, receive twenty-five dollars worth of benefit? In a large number of instances it is evident that the expenditure of twenty-five dollars would markedly improve the physical status of the child, if invested in personally constructed efforts, such as the removal of diseased tonsils, the securing of proper glasses, the supplying of medical and surgical material necessary to build health upon surer foundations. A large amount of the present costs, at least twenty-five per cent., is absorbed in salaries which, necessary tho they are, cannot aid directly in child reconstruction. Investigation has shown that in many of the summer camps that have been regarded as exemplary summer benefactions, the hygienic conditions are not in harmony with the highest standards of modern medicine. There has been a looseness in summer fresh air activities as a result of inertia and the general willingness to make use of them without questioning the exact nature or value of their services.

Summer fresh air activities possess definite communal values, but these should be carefully defined. There should be no deception as to the end-results or the purposes of these activities. The distinctions between essential health values and social familial values should be recognized. To send children away, for example, to improve their physical resistance, is not identical with giving them a vacation so that the wearied mother may have some relief from the pressures of child care. The mutual separation during the summer season of parents and children may be advantageous to family morale, and thus contribute to the mental hygiene of family life. This is a health value that is not to be ignored and, if it is sufficiently valuable, then its purpose in summer fresh air camps should be admitted, instead of placing the emphasis upon the improvement of the health of the children. If children are sent away to private homes, summer camps, vacation homes, or special institutions during the summer merely to give them an opportunity for play, then it becomes necessary to face the problem as one dealing with recreation as a communal responsibility rather than as a health measure. If the aim is to offer children a different environment in which to secure freer social opportunities and new habits in social adjustment, this point of view should be understood and the summer activities should be defended in this score. There should be no false approach to the situation. In a broad sense, all of these purposes possess social value but they are not equally meritorious as health measures.

It is exceedingly doubtful whether all the fresh aid activities of the past few years have played any appreciable part in the reduction of infant mortality or the decreased morbidity and mortality of children between the ages of two and ten years. The total number of children who have enjoyed the opportunities of special summer facilities has been too small to play a large part in influencing the morbidity or mortality rates. The real factors at work have been the medico-social agencies engaged in all-year-round activities with mothers and children. The fresh air activities that have a three hundred and sixty-five day season have undoubtedly been effective, because their field of service has been constant and based upon principles of health conservation and restoration without reference to a specific seasonal activity. Constant fresh air work is more valuable than summer vacation spurts, as a result of which a large number of children are given extra food and play, together with new conditions of sunshine and fresh air for short and inadequate periods of time.

At the beginning of the summer season, therefore, it would appear wise to revalueate summer fresh air work with a view to establishing it upon sound foundations. The greatest good to the largest number is always a legitimate goal, but this is a far different principle than trying to give two weeks' life in the country to the largest number of children, irrespective of their personal needs. Undoubtedly a survey might show that the expenditure of money now involved could be more advantageously employed for the benefit of those who are not accepted for camps, as compared with present expenditure for the children sent away for reasons of sentiment rather than for essential physical needs.—(*Am. Med.*, May, 1925.)

"The Cottage Institution"

"There is no place like home" for children, according to the Children's Bureau of the U. S. Department of Labor. If institutional care is necessary, however, the Bureau urges that the institutions be as homelike as possible. Such a children's institution is illustrated by a new model exhibited by the Bureau at Washington during the meeting of the International Council of Women.

This model shows a miniature "cottage institution," pleasantly located in the midst of a rolling countryside boasting a brook or small river, woods and open meadows—ideal surroundings for growing children. A paved road and electric trolley connect the institution with a near-by town or city, the outskirts of which are represented in the model by miniature houses, churches, schools, stores, and even a moving-picture theater.

The institution itself as shown in the model is far different from the conventional idea of an "orphan asylum." Eight small cottages, looking like very attractive family bungalows, each surrounded by shady lawn, provides living quarters for approximately 100 children. Each cottage would, in real life, accommodate 12 children, a house mother and her assistant. The children of each house would have their own dining-room and living room, and the whole atmosphere would be that of a big family. Conveniently near all the cottages is a playground with all kinds of apparatus, a gymnasium, a baseball diamond, a swimming pool, and individual gardens for each child affording ample facilities for recreation and exercise. Other buildings included in the institution are an administration building, a reception and isolation cottage where new arrivals are housed, a superintendent's house, a farmer's cottage, a big barn, a central power house, a garage, and a central laundry. The children's cottages are all one-story. The general buildings are in most cases two stories. There is no school or church connected with the institution because it is considered desirable for the children to attend the town churches and the public school, thus making normal contacts with the community.

Miss Emma Lundberg, Director of the Social Service Division of the Children's Bureau, responsible for the planning of this model, says:

"In studying this model of a cottage institution, it must not be forgotten that institutional care is only one of several methods of providing for dependent children. The prevention of child dependency through family-relief work and public aid for dependent children in their own homes, and other factors in the social and economic life of the country, have definitely lessened the need for institutional care. The Children's Bureau believes that it is far better to prevent the break-up of homes through mothers' pensions and constructive social-welfare measures than to build institutions for the care of children for whom home life might have been saved. A growing number of people have come to believe in foster-home care as approximating most closely the conditions of normal family life, and as offering better opportunities for individual upbringing than is possible in institutions. Broadly speaking, the purpose of an institution for dependent children should be the care of children who can not be provided for properly in their own homes or with relatives, and for whom the institution is better adapted than any other form of care available."

These agencies found it possible to change their methods to conform with the new law and so stayed in the field. "But," the Children's Bureau report states, "there were in Baltimore, before the enactment of the law, other agencies which have now gone out of existence because they no longer found a profitable field for their business. Chief among these were the small commercial maternity hospitals conducted by persons of differing qualifications—midwives, nurses, or others. These hospitals were of the same type as such enterprises everywhere—marked by promises of seclusion and secrecy, giving poor care to patients, engaging in 'baby traffic'—performing each service for a price. Comparison of the number of such agencies in existence before the law became effective and since then would be informing, but as there never has been any central registration of these places, such comparison is impossible."

Another result of the law seems to be that fewer unmarried mothers come from States other than Maryland to Baltimore for the birth of their babies. It was also found that, in spite of the fear that the law would lead to an increase in the number of babies abandoned, the number of foundlings during the year preceding the passage of the law was 23 while the number in 1923 was 6.

A very important feature of the Maryland law, the Children's Bureau points out, is its provisions for regular proceedings, and formal records, in cases where separation of a baby from his mother for placement in a foster home or institution is desired. Such separation is not permitted except in one of three ways: On the signing of certificates by two qualified physicians stating that the separation is necessary for the physical good of the mother or of the child, and setting forth the reasons for this

necessity; by direction of the Board of State aid and charities; or by order of a court of competent jurisdiction. A record must be kept of the institution or home in which the baby is placed.

The Children's Bureau found sentiment to be markedly in favor of the law unqualified approval was given by the great majority of the sixty persons associated with the twenty-four organizations studied who were asked to state their attitude toward the law. The group included public officials, superintendents of hospitals, child-caring institutions, and social agencies, doctors, nurses, social workers, a judge and members of governing board of institutions. All remarked on the advantage of the law from the point of view of saving babies' lives.

Infant Mortality

Decreased infant mortality, fewer commercial agencies profiting from the unfortunate situation of unmarried mothers, fewer abandoned babies—these were found by the United States Children's Bureau to be some of the results of the Maryland law forbidding, except under special conditions, the separation of mother and baby for the difficult first six months of the baby's life..

Maryland's so-called "six-months law" attracted wide attention when passed by the State Assembly in 1916. By 1921 sufficient time had elapsed to make a study of results possible. The Children's Bureau undertook this study in Baltimore, concentrating most of the investigation on the welfare of illegitimate babies, most likely to be affected by the law. Miss Rena Rosenberg and Miss A. Madorah Donahue wrote the report.

Most striking was the enormous saving in baby lives apparently due to the law. In 1915 one out of every 3 babies of unmarried mothers died during the first year of life, and 1 out of every 4, during the first six months. In 1921, only 1 out of every 8 died during the first year, and only 1 in every 12 during the first six months. The reduction in infant mortality was more than 50 per cent. During the same period the rate for infants of legitimate birth was reduced less than 20 per cent. In 1915 illegitimate babies died at a rate three times as high as the rate for infants born in wedlock; in 1921 at a rate only one-and-a-half times as high.

The decrease in mortality from gastric and intestinal diseases among the illegitimate babies was great, particularly during the early months of the first year. This, the bureau believes, may be the result of the increase in breast feeding made possible because the mothers and babies were kept together.

In order to discover the effect of the law upon agencies caring for the unmarried mother or her baby, 24 hospitals, social agencies, and maternity homes in Baltimore were visited. Twenty of these had been engaged in social service affecting the illegitimacy problem both before and after the law became effective. In 13 of the 20, it was found, no changes were evident in the methods of dealing with the unmarried mother and her baby. The other 7 had adopted policies which were the direct result of the operation of the law. Before the passage of the law their plans of work were varied. Some of them accepted babies of any age on surrenders signed by the mothers. Some of the hospitals arranged that mothers would not see their babies; some hospital superintendents placed advertisements in the newspapers offering the babies for adoption. Sometimes surrenders of their children were signed by mothers before the children were born.

Child Management*

Tendencies toward thinking and acting in certain ways, which are called habits, are the outgrowth of training and experience. They are not inherited. We begin to form habits at birth and go on through life, forming them quickly and easily in youth and more slowly and with difficulty as the years advance. The oftener the act is repeated or the thought is indulged in the more lasting the habit becomes. Since habit formation begins early and is more or less constant throughout life it is of great importance that emphasis be placed upon establishment of desirable habits.

A young child has certain characteristics that make the acquiring of new habits easy. For one thing, he is suggestible; that is, he accepts without reasoning about it anything which comes from a person he looks up to. "My father said so" or "My mother did it" makes a thing absolutely right for a little child. Again, a child naturally tends to imitate the words, actions, and attitudes of the people around him, and this makes it of the greatest importance that older people furnish him the kind of models they want to have copied. Furthermore, a child wants to please those he loves and wants to have them say so. At first it is only father or mother or some one in the immediate family whose good opinion he wants. Then it is the kindergarten or school teacher. Finally, at 9 or 10, the praise or blame of his playmates or of the gang leader concerns him more than anything else. When this stage is reached parents should not be disheartened and think that their boy is developing into a black sheep. It is a perfectly natural stage which children pass through and which calls only for greater care in the selection of wholesome companions.

This attitude of concern regarding what other people think is a force that parents may use in developing right conduct. Rarely is a child found who does not care for the approval of some one, and training should make a child realize that it is to his advantage to win approbation for desirable acts. Praise for unselfishness, kindness, and general consideration for others tends to perpetuate that type of conduct.

*This article is part of Publication No. 143, by Dr. D. A. Thom, of the Children's Bureau of the U. S. Department of Labor, Washington, D. C. The entire bulletin may be secured free by writing to the bureau.

New Type of Smallpox Suspected

Smallpox is not alone prevalent in the United States, but is general throughout the world at the present time, according to the monthly Epidemiological Report of the Health Section of the League of Natins Secretariat. Copies of this report, just received at the League of Nations Non-Partisan Association in New York, show that in England, Spain, Switzerland, Algeria and Tunis there was an increase of the disease in a period ended February 21st.

The report suggests that the type of smallpox now prevalent in the United States has changed from that of previous years. The report says:

"Smallpox remains widespread in the United States and shows a continual tendency to increase; 4,227 cases were reported in 27 States during the four weeks ending February 21, as against 3,540 during the preceding four weeks. The disease is most prevalent in the Southern, Central and Western States. The outbreak of very fatal smallpox in Minneapolis reached its maximum in December, but numerous cases and deaths are still occurring.

"The gradual increase of the fatality suggests that a change of type has taken place, as the fatality ratio is usually highest at the beginning of an epidemic, while the contrary has been the case here. Fatal smallpox has been reported from various other cities during January, in particular, from the small town of Camden, in New Jersey, where 24 cases and 9 deaths were reported during the four weeks ending January 31. Twenty-five deaths were reported in other cities during the same period, indicating a more severe type than formerly."

The conditions in other countries of the world are summarized by the report as follows:

"Smallpox has continued to spread in England; 593 cases were notified during the four weeks ending February 21, as against 416 cases for the preceding four weeks and 250, 153 and 52 respectively during the corresponding periods of 1924, 1923 and 1922. The type remains mild, no deaths having been reported from the towns.

"Very few cases are reported on the Continent outside Russia and Spain, except for a new outbreak in Switzerland, where 78 cases were reported during the four weeks ending February 28, as against 26 during the preceding four weeks; this however, represents only one-fourth of the incidence observed during the corresponding season of the two preceding years. The majority of cases occurred in the Canton Lucerne.

"Smallpox has increased in Spain since the early summer of 1924, and a high mortality is reported. During December, 1924, 252 deaths from this disease occurred, as against 59 in December, 1923.

"Fewer cases of smallpox are reported in Russia than in previous years; in November, 1924, only 718 cases were reported, of which 250 occurred in Asiatic Russia, as against 1,327 and 3,289 respectively during the corresponding months of 1923 and 1922.

"A higher number of cases has been reported during the winter months in Algeria and Tunis than during the two preceding years. On the other hand, the disease shows no unusual prevalence in Egypt.

"An annual minimum incidence was reached in October in India, followed by a fresh increase. The number of cases reported up to January 10 differs little from that of the corresponding period of the preceding year."

League Endemic Commission

The function of the Health Organization is to act as a connecting link between the national health administrations, and advise the Assembly and Council of the League on all public health questions with which they deal. This work has developed along several distinct lines:

(a) The first emergency that confronted the States members of the League after the war was the extent and severity of epidemic in East Europe, and for this purpose a temporary organization, the League Epidemic Commission, was created, which gave assistance to the governments of East Europe both in the

shape of material relief, technical advice and coordination of their efforts. This work for the most part was carried out in Poland, but later extended to Russia and Latvia. The influx of refugees into Greece as a result of the Greco-Turkish war created a fresh epidemic problem and here, again, the Epidemic Commission of the League helped the Greek government to organize a vaccination campaign and in other ways to handle the health problems presented by the refugee population. Altogether, the Epidemic Commission disposed of some £300,000, contributed chiefly by voluntary subscriptions from the governments members of the League.

(b) The permanent work of the Health Organization began with its Epidemiological Intelligence Service, whose purpose is to inform all national health administrations, promptly, accurately and fully, of the incidence of epidemics all over the country. A service of this sort is indispensible to the health authorities responsible for keeping disease out of their respective countries. Thanks to a subsidy of $30,000 a year for five years from the International Health Board of the Rockefeller Foundation, it has been possible to plan this work on a large scale and the service now includes all European countries (except Portugal and Albania), all North and South America and such African and Asiatic countries as have a regular epidemiological intelligence service. A Far-Eastern Epidemiological Intelligence Bureau has been set up at Singapore, and a weekly bulletin is being wirelessed free of charge by the French Government station at Saigon, thence caught by the Far-Eastern administrations and by a wireless station in France, and telephoned from Paris to the head office of the Epidemiological Intelligence Service at Geneva and there incorporated in the weekly bulletin of that office, which receives similar information by wireless or cable from Mediterranian and Black Sea ports, and then broadcasts the complete bulletin to all the health administrations of the world.

In addition to collecting and disseminating epidemiological intelligence a beginning has been made in bringing together statisticians actually responsible for compiling this information in their respective countries, so as to have them work out common, or at least comparable methods and establish close cooperation between them and the central service at Geneva. Several inquiries are also on foot for improving and making internationally comparable the methods in use in different countries.

(c) Direct cooperation between health administrations has been established by so-called "interchanges of public health officials" who are brought together in groups of ten to twenty (one or two from each country) to study either the way a special subject (e. g., tuberculosis, child welfare or industrial hygiene) is dealt with in several countries (this is a so-called "specialist interchange") or to study the whole health service of one country (a so-called "general interchange"). This work, too, is being aided by a subsidy of first $60,000 and now $100,000 a year from the International Health Board of the Rockefeller Foundation for a period of three years.

(d) The Health Organization is mentioned or utilized in one way or another in most of the sanitary conventions concluded since it came into existence. These conventions, notably, provides for direct communication between health administrations, for copies of all information exchanged being sent to the health section of the League Secretariat, and in many cases for the League Health Committee to be used as an organ of mediation in case of disputes rising out of any of these conventions. Similar provisions have been inserted in the chapter of the revised text of the 1912 Sanitary Convention that have been prepared by the Health Committee in conjunction with its Advisory Council. A big conference is to be held at the end of 1925 or the beginning of 1926 to revise, coordinate and bring up to date in the light of post-war conditions, the Paris Sanitary Convention of 1912 and the various conventions that have been concluded or proposed since its inception—e. g., the Pan-American Sanitary Convention of 1924, the proposed convention between Far-Eastern states, the various bilateral or other local conventions concluded in Europe, etc. A number of inquiries are being conducted through the Health Organization that will eventually result in various agreements and understandings between health administrations.

(e) A further line of work, which there is space only to mention, is the so-called "applied research work" on the standardization of sera, serological tests and biological products. The purpose of this work is to standardize internationally the various products and drugs now being used in modern medicine in different countries. Such products are made and measured by independent and wholly different methods in different countries, which is highly inconvenient both from the point of view of doctors who wish to study each other's results and of pharmacists who wish to sell in one country products made in another.

In conclusion it may be said that through the Health Organization a vast amount of work is being done to draw the national health administrations together, promote their cooperation, act as a clearing house of information on all health matters, etc. The United States and Germany are members of the League Health Committee, and Russia has been cooperating in several branches of the Health Organization's work. Turkey too has been supplying information proferring requests for advice, and participating in interchanges. In the field of public health, therefore, the League is already universal.

Physical Unfitness

Physical unfitness is a term merely of relative significance, according to Dr. Chester T. Brown, associate medical director of the Prudential Insurance Company of America. A man may not be fit to fight or to undergo the strain of prolonged or strenuous muscular exertion, and yet outlive the warrior or the athlete. If he is normal, he is fit, and it has been the experience of Dr. Brown and other medical authorities concerned with the problems of life underwriting that fitness, physically speaking, is the rule among men under forty.

During the world war, or rather when the United States entered it and put the draft law into effect, there were enough rejections on physical grounds to create the impression that this was a nation of flatfooted men born with a remarkable assortment of bodily defects. But this, Dr. Brown says, was the result of an attempt to apply to vast numbers of recruits for the fighting forces the extra high standards devised for a peace time army which prided itself on the physical excellence of its personnel.

As a matter of fact Americans meet the medical tests devised to support insurance standards based on normal life expectations extremely well. Rejections of applicants for policies have been steadily decreasing in number for approximately fifteen years. They now represent, in the experience of the Prudential at least, only 6.02 per cent of the total number of applicants compared with almost twice that ten years ago. But the significant feature of this showing, pointed out by Dr. Brown, is that most of these rejected had passed out of youth and attained the age at which physical imperfections and impairments begin to manifest themselves.

There has been an improvement of more than two and a half per cent since prohibition went into effect, but Dr. Brown was not inclined to attribute much of the credit for it to the Volstead act.

"It is more likely the result," he said, "of our greater appreciation of healthy bodies, though it remains true probably that many of us eat too much and are inclined toward excesses in other ways—straining hearts, for example, by too much exertion in competitive sports. If this were not so, there would be fewer rejections of insurance seekers at age 40 and beyond. It is also attributable in some part to health propaganda by organized bodies devoted to the object of increasing the span of life. But most of the credit perhaps is due to the fact that insurance companies have found their experience has warranted liberalization of their requirements.

Since 1911, when the percentage of rejections almost matched the high mark of 15.15 in 1899, a steady improvement in the physical condition of life insurance applicants has been noted by Prudential medical examiners. In 1911 the percentage of rejections was 14.89. The marks of succeeding years were: 1912, 14.23; 1913, 13.12; 1914, 11.81; 1915, 11; 1916, 11.91; 1917, 11.88; 1918, 9.57; 1919, 9.01; 1920, 8.65; 1921, 7.42; 1922, 6.92; 1923, 6.18; 1924, 6.02.

Nevertheless, the Prudential last year rejected 32,666 applicants for life insurance.

"And this," said Dr. Brown, "was far too many."

"Rejections," he added, "constitute the bugbear of life insurance. They deprive people of the protection they or their dependents need. The agents lose the commissions on which his livlihood depends, and the companies not only lose business but also the cost of handling these cases. It is a dead loss all round, and the worst of it is that it is a loss which, as demonstrated by the improvements already noted, can be circumvented. It is merely a question of getting insurance in youth, and of adopting moderation as a rule of life."

Banti's Disease

Banti's Disease is a form of cirrhosis of the liver, occasionally met with towards the age of puberty. It is a form of splenic anemia, at times met with in later childhood (it must be clearly distinguished from the splenic anemia of infants), and, after lasting for a few years, ends in portal cirrhosis which in time proves fatal. It can be distinguished by the fact that enlargement of the spleen has for long preceded the sign of cirrhosis, and if splenectomy is performed before the cirrhosis is developed there is reason to believe the disease can be cured.—(*Robert Hutchison.*)

The Physician's Library

Approaching Motherhood. Questions and Answers of Maternity. By George L. Brodhead, M. D., Visiting Obstetrician Bellevue and Allied Hospitals. New York: Paul B. Hoeber, Inc., 1825, 193 pages.

This attractive little book is a distinct addition to popular medical literature and we prophesy for it the same wide-spread popularity among the laity that Holt's similar book on children still has. It is more modern and quite as thorough and practical.

The author is well known as a wise and skillful obstetrician and a high-toned gentleman. Need we say more?

It is not easy to choose the best among the eighteen chapters of questions and answers, but we note as especially valuable, chapter II on the physiology and signs of pregnancy and those on hygiene, diet and exercise, complications and accidents, confinements and the after results and nursing. Every chapter is preceded by a blank page on which the patient is urged to write down any questions which she may wish to ask her doctor.

A carefully prepared index concludes this book, the type and general makeup of which reflect no little credit on both author and publisher. Our patients will dabble in medical books which are beyond their depth and only serve to confuse and often to alarm them. We question if the present unassuming primer of the most important subject for women does not have a longer life than the elaborate treatises which soon become old and are discarded. H. C. C.

Diseases and Deformities of the Foot. By John Joseph Nutt, M. D., of the New York Polyclinic Medical School, 2nd edition; 309 pages, New York: E. B. Treat & Company, 1925.

A book written by the surgeon-in-chief of the New York State Orthopedic Hospital for Children at once commands attention of interested readers. Dr. Nutt is one of the most experienced orthopedists in the country and his book is based on his very large clinical experience. He states forth clearly the various foot diseases and deformities which come to the physician's attention and shows how they can be handled. The book is well illustrated and is prepared in a most practical manner.

Genito-Urinary Diseases and Syphilis. By Chas. S. Hirsch, M. D., Philadelphia, 337 pages. Philadelphia, P. Blakiston's Son & Company, 1925.

All the conditions of the character indicated are clearly set forth in this combination. The fourth edition has been revised so that it takes in everything new in urological and syphilogical conditions. On the whole the book can be regarded as up-to-date and is certainly of value in aiding the physician to brush up on this specialty.

Infection, Immunity and Inflammation. By Fraser B. Gurd, M. D., of McGill University. 329 pages. St. Louis: M. C. V. Mosby Company, 1924.

This is a study of the phenomena of hypersensitiveness and tolerance and their relationship to the clinical study of prophylaxis and the treatment of disease. The author has demonstrated that hypersensitiveness and tolerance often exist in the same individual, and he points out the very great importance of this occurrence because it has much to do with the study of the clinical phenomena as well as with the treatment and prophylaxis of infectious diseases.

The author presents the book in the hope that it will stimulate other clinical observers to further study of this branch of biology.

Proceedings of the International Conference on Health Problems in Tropical America. Boston: The United Fruit Company, 1924.

To those interested in tropical diseases this book is of great value. It contains articles by such authors as Rosenau, Bass, Noguchi, Iturbe, Ahsford, Banting, Arbunot Lane, Newsholme, Park, Mallory, Strong and Maj. Nichols, U. S. A.

The discussions as well as the papers are published in full and these, together with splendid illustrations, give us a book of tropical diseases which is of very distinct usefulness.

The United Fruit Company is to be congratulated upon its enterprise in making such a meeting possible and Dr. Deeks, the medical director of the Company, showed the greatest enterprise in carrying out details.

International Clinics, Volume 1, 35th Series. Philadelphia and London: J. B. Lippincott Company, 1925.

This volume is devoted to two medical clinics given by Dr. Barker of Johns Hopkins, eight articles on diagnosis and treatment by different authors, three on mental disturbances, six on surgery, one on toxicology and a long and very comprehensive review of the progress of medicine in 1924. The papers are excellent and Dr. Cattell's review, in the preparation of which he was assisted by Maj. Coupal, President Coolidge's physician, is comprehensive, instructive and in every way valuable.

Pseudo Appendicitis. By DeMartel and Antoine of Paris; translated by James A. Evans, M.D. 211 pages. Philadelphia: F. A. Davis Co., 1925.

This is a study of the mechanical syndromes of the right lower quadrate which stimulates appendicitis. It is ofen difficult to differentiate between fecal stasis of the secum adhesions, spasmodic contraction of the terminal and appendicitis. The authors have brought out the difference between these various conditions and have shown through X-ray studies how one can properly diagnose the existing condition.

International Clinics. Edited by Henry W. Cattell, M.D., volume 2, 35 series. Philadelphia and London: J. B. Lippincott Company, 1925.

The latest issue of this always interesting and instructive book is devoted to three monographs on the present status of effections of the kidney, on fistula and on dysentery, as well as articles devoted to diagnosis and treatment, medicine, surgery and pathology.

Two of the most interesting features are the alpha and omega of the volume. One on Tait McKenzie's medical portraits which shows portrait medallions of seventeen physicians, including Weir Mitchell, W. W. Keen, Musser, Long, Osler and Chevalier Jackson. The other is an article of Surgeon General Ireland of the army on the medical department reserve. This sets forth the entire idea upon which the reserve is based and is exceedingly valuable for all physicians who are members of the reserve or who plan to be.

Conduction, Infiltration and General Anesthesia in Dentistry. By Mendel Nevin, M. D. S. and P. G. Puterbaugh, D. D. S., 360 pages, Brooklyn: Dental Items of Interest Publishing Company, 1924.

This book sets forth as its title indicates the various methods of producing anesthesia in the work which comes primarily to the attention of dentists. Very much of the dental surgeon's operative procedure is done under local anesthesia and it's well, therefore, that the details local anesthesia should be set forth. The authors have presented the subject in a very lucid manner, aided by a large number of photographs.

Correspondence

Dr. Fordyce on Staff of The Infantorium

To the Editor of THE MEDICAL TIMES:

In the beautiful tribute to the late Dr. John A. Fordyce, I find that among the many institutions with which he was associated, some have been omitted. The Infantorium is one of them to which Dr. Fordyce gave up his time and valuable service when called upon.

He was always ready to see our cases as consultant and added greatly by his reputation and experience, to our consulting staff. We share the loss sustained by other hospitals.

Dr. Fordyce extended the courtesy of his laboratory, and Dr. Jagle, his associate, examined our spinal fluids in many cases.

LOUIS FISCHER, M. D.
For the attending Medical Staff.

New Resident at Lloyds

Baroness Olga De Gotter, M. D., formerly admitting physician at Bellevue Hospital, New York: Has been appointed resident physician at the New Lloyds Sanitarium, 8 St. Nicholas Place, New York.

Dr. Bierman in Europe

Dr. William Bierman sailed June 20th for Europe. He has been visiting the various clinics in London, Paris, Berlin, Vienna, etc. He read a paper before the International Congress of Radiology on "The Use of Surgical Diathermy in the Treatment of Hœmorrhoids."

Glycosuria

Every patient who has sugar in the urine is not a diabetic. Have an estimation made of the *blood* sugar and study the case carefully, in a hospital if possible.—(*Clin. Med.*)

Diagnosis and Treatment

Evidences of Hypothyroidism and Hyperthyroidism in a Rheumatic Child

Llewellyn of London remarks that out of the somewhat bewildering congeries of morbid signs and symptoms presented by children of rheumatic stock, their liability to tetany and also to symptoms of vasomotor ataxia stand forth from the endocrine viewpoint as the most arresting features.

Their proneness to tetany has long been known. Remarked by Goodhart it was recently emphasized by McCarrison's observation that "Rheumatism is frequently associated with tetany." Indeed this tendency to tetany seems to run like a thread through the life history of the disorder, as it crops up again in the rheumatic fever of older subjects. It may arise actually during its course, but more often after its close when—it may form an interconnecting syndrome between rheumatic fever and a subsequent rheumatoid arthritis—its origin attributable perhaps to the hypothyroidism that so often follows the former disorder. Just as at the close of rheumatic fever symptoms of Graves's disease may arise, so also, in the declining stages of tetany have Kahn and Falta seen the thyroid enlarge with marked symptoms of exophthalmic goitre.

Tetany is avowedly due to thyroparathyroid defect. Its association not only with Graves's syndrome, but also myxedema, is aknowledged, and more especially with goitre. Its kinship with these disorders is the more significant in that they are all distinctly of hereditary and familial trend—especially goitre. The children of the goitrous tend to be goitrous—but this not necessarily through hereditary transmissions as in regions where goitre is endemic the same causes may be operative in parent and offspring. On the other hand, if the goitre be accompanied by thyroid insufficiency, this subthroidic taint is hereditary transmitted to the offspring. Women when goitrous and subthyroidic are extremely prone to tetany—a symptom in itself of thyroparathyroid insufficiency, and the subthyroidism thus disclosed is handed on to their offspring with its correlated liability to tetany.

Children of rheumatic stock are also liable to tetany, and therefore similarly suspect of thyroparathyroid inadequacy. Moreover, my own experience leads me to suspect that a subthyroic taint in parents entails on their offspring not only a special liability to tetany, but to rheumatism and rheumatic fever, as also to the rheumatoid or atrophic and osteoarthritic or hypertrophic types of arthritis deformans. He has noted the following points which appear to be of etiological import:

That in regions where goitre is endemic the incidence of rheumatic affections appears to be abnormally high. So much so, that practitioners migrating from a nongoitrous to a goitrous locality, are immediately struck thereby; not only by the number of cases of rheumatic fever they meet with, but the frequency with which cardiac lesions—not preceded by rheumatic fever—occur. Also, by the frequency with which cases of rheumatoid arthritis are encountered, and incidentally, that as far back as 1902, he pointed out the frequency with which rheumatoid arthritis and Graves's disease coexisted. Moreover, having observed in instances of preexisting Graves's syndrome that recession of the thyroid swelling was followed by rheumatoid arthritis, he suggested the administration of thyroid gland, the good effects of which in well chosen cases of rheumatoid arthritis are now well established.

That if rheumatic fever develops in the child of a goitrous mother it shows a strong impetus to chronicity, being rebellious to salicylates. Also, if it occurs in a child, not necessarily with a mother actually goitrous, but living in a region where goitre is endemic, it may show the same peculiarities. Now seeing that goitre and subthyroidism are frequently associated, and that subthyroidism is markedly hereditary, it seems to indicate that the hereditary and familial tendencies to rheumatic fever are transmitted through the endocrine glands—notably, but not exclusively the thyroid. Also, that the nonresponse to salicylates is linked up in some obscure way with thyroid or thyroparathyroid defect or instability.

That this obduracy to salicylates relents if in addition thyroid therapy be invoked—the thyroid appearing to activate the otherwise impotent salicylates. This renders more plausible my suggestion that this rebelliousness to salicylates is bound up in some subtle way with the thyroid deficiency or instability. Now, apart from definitely goitrous regions, the present fashion of exposing the necks clearly shows that goitre is far more common in adolescent girls than was previously suspected. Accordingly, our search for the minor evidences of thyroid insufficiency in such subjects is urgently indicated. The more so if, subthyroidism connotes a special liability to rheumatic affections. For if so, it follows that the original predisposing factors that make for the development of rheumatism in childhood, and of rheumatic fever in older subjects, ought to be sought for in those conditions— intrinsic and extrinsic—that determine the production of subthyroidism.

The subthyroidism of rheumatic children is further tokened in that they are often ill-nourished, do not grow or put on weight, like other normal children of their own age, i. e., arrest of development. Again, their temperature is often subnormal, their skin dry and harsh, their hair sparse on scalp and outer side of eyebrows, with deficient appetite and constipation—signs all of them of hypothyroidism.

Additional evidence of their subthyroidism is to be found in their tendency to casomotor ataxia—symptoms due to correlated lowered excitability of the sympathetic system, viz., slow pulse, cold hands and feet, dead fingers, chiblains and true Raynaud's disease.

Is it not significant, too, that the disorders—urticaria, erythemia, migraine, asthma, mucous colitis—to which rheumatic children are prone, occur with notable frequency in subthyroidic subjects? Still more that such often undergo attenuation or cure by thyroid therapy? But—it may be objected—are not these various affections often ascribed to protein sensitization and moreover prone to hereditary transmission? Admittedly so, and the same is perhaps secured by endocrine heredity. For there is some evidence that the protective mechanisms of the thyroid extend to anaphylaxis.

If rheumatic children slow signs of hypothyroidism, they exhibit also from time to time signs indicative of hyperthyroidism. Thus, they are highly nervous, are prone to emotional outbursts, bouts of epigastric pain and diarrhea, sweatings, cardiac palpitations, and loss of weight; symptoms presumably resulting from the influence of the thyroid secretion on general metabolism and the adrenal sympathetic system.

We see then that though hypothyroidism may, so to speak, be dominant in rheumatic children, it is not exclusively so. For, as seen on a substrate of hypothyroidism symptoms of hyperthyroidism manifest themselves after a paroxysmal periodic fashion. The explanation presumably is that, given functional inadequacy of the thyroid with consequent endocrine imbalance the defective gland will, from time to time, strive to correct the disequilibrium. This, as it were, by phases of reactive thyroid hypersecretion, the paroxysmal or periodical incidence of which is determined by similar fluctations in activity of those factors or conditions tending to inhibit the gland's function and which primarily occasioned the underlying state of hypothyroidism.

In these subthyroidic rheumatic children, tentative thyroid administration often lessens or dissipates their tendency to periodical phases of hyperthyroidism. This, as is revealed by their proneness to disorders of paroxysmal incidence, e, g., tetany, migraine, dead fingers, Raynaud's phenomena, etc.—*N. Y. Med. Jour.*, May 20, 1925.)

Hyperthyroidism

G. W. McCaskel, formulates the following conclusions on the basis of careful observations of many cases and says, considering the clinical reports of the last couple of years together with my own experience it might be worth while to outline the clinical data which should make one at least think of hypothyroidism. The usual characteristic stigmata consisting of dryness and roughness of skin, tendency to obesity, sluggish mentality, etc., need not here be included, as they are well understood by clinicians everywhere. Aside from these the following points gleaned from recent observations may be mentioned.

1. Cardiac myasthenia.
2. Tachycardia, disappearing with rest.
3. Low pulse pressure (Davies and Eason).
4. Extremely low temperature.
5. Large diastolic volume of heart recognized fluoroscopically with small systolic, diastolic excursion.
6. Arteriosclerosis and nephritis (Wilson).
7. Sluggish tendon reflexes (Chaney).
8. Low polynuclear differential blood leucocyte (Hutton).
9. Obscure central nervous system syndromes especially cerebellar (Lundberg).
10. Low resistance to infection (Marinesco).

He says, that these points are not offered as furnishing any strong evidence of hypothyroidism as every one of them may occur under other conditions with a normal metabolic rate. They have simply been observed to occur in cases of hypothyroidism and disappear as the metabolic rate rose with thyroid medication.

The entire subject of hypothyroidism is certainly deserving of more routine consideration than has been given to it, until quite recently.—(*Jour. Ind. Med. Asso.*)

(Continued on page 206)

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A Medical Bible

It would seem that some great publishing house or representative professional body could do no finer piece of work than to collect the most "sacred" of our modern sources of practice and reprint them, in English, as a Medical Bible. Judicious editing and condensing of such classical contributions, despite their vastness and the consequent magnitude of the task, should give us a reasonably compassed volume, say of the size of the Bible itself.

We have all read Banting on insulin, but how many of us have seen Withering's paper ("Account of the Fox-glove"—1785) introducing digitalis to the profession? Why should not the epoch-making sources of our art be made into a Testament? In this form, medical history would be invested with a unique zest and charm.

An enterprise of such scope should, we think, be best undertaken under the auspices of some representative body with great resources and commanding the ripest scholarship and judgment, such as the American Medical Association. Under the personal supervision of such authorities as Fielding H. Garrison and C. N. B. Camac such a work would be sure to reach a glorious conclusion. It is the one thing needed to put the capstone upon the colossal arch of medical literature the scattered stones of which lie ready for scholarly architects.

Camac's valuable work, "Epoch-Making Contributions to Medicine, Surgery and the Allied Sciences," Saunders, 1909, reprints eight of such sources. But the work suggested in this editorial would obviously be of a far more comprehensive character, with little matter other than the contributions themselves, and would cover practically the whole field of modern medicine.

The Technic of Suicide

Strange to say, spectacular modes of suicide do not seem to excite much emulation or competition. There has been no successor, so far as we know, to the ambitious Frenchman who, in 1835, according to Arntzenius, desirous of leaving the world in a distinguished manner, reviewed the various methods of committing suicide and found none to his taste, thereupon resolving upon something new. He had built for his purpose an enormous rocket, attached himself to it, lit the fuse, and was last seen traveling in the general direction of the planet Venus.

There is a lamentable lack of imagination and originality in this matter of suicide. It is all too stupid and imitative. To commit suicide by any of the prevailing methods is to stand convicted of complete dullness. A man who would cut his throat with a knife or plant a bullet in his cerebrum would be capable of opposing the teaching of the theory of evolution in the schools supported by the State.

After the Pole has been touched by plane and dirigible it would seem that the field of suicide should offer large rewards in fame for its exploitation by live Americans, who always lead the world where *material* progress is concerned. Our methods in this sphere must be improved. Present conditions are a disgrace.

Suicide must be made interesting. Indeed, there is no reason why it should not be raised to the dignity of a fine art.

Our Sadistic Movies

A strongly marked feature of the American movie is brutality. This brutal element prevails in a majority of the films. A beating-up is preferred to a shooting-up, because of its primitive character. A high degree of ingenuity is employed by directors and actors in order that the scenes may be prolonged and intensified. Cruelty in any form is played up to the limit.

Superficially, a decent public opinion is ostensibly taken into account, in that vicious characters are always defeated and even punished. It is clear enough, however, that this is only a camouflaging device—a transparent concession.

This type of movie deliberately caters to the suppressed sadistic instincts of the spectators, considered both as mobs and as individuals.

The popularity of such films, and their evident enjoyment by the fans, proves the producers to be correct in their understanding of the masses.

The relation of sadism to sex is well understood by medical men. The real irony of the situation in the movies consists in the frantic efforts of the smut-hounds to limit the duration of a kiss, or to tone down a bedroom farce, or to keep enough clothes on the stars, while the graphic presentation of sex in its most brutish, vicious and perverted forms gets over with a terrific wallop.

Nothing more is needed to prove the futility of censorship and the imbecility of censors.

General Practitioners in Disguise

One is justified in smiling to himself a little when one hears the "defunct" general practitioner discussed. As a matter of fact an amazing proportion of men generally rated as specialists, surgeons, internists, etc., are in general practice for all they are worth. And it would seem that they have no desire to live and work otherwise. It is a natural outcome, rather than an economic phenomenon.

Of course, there never was a general practitioner who did not excel in some special line, or who was not pre-

ponderatingly interested and skilled in some particular phase of the art.

There seems to be a kind of tacit agreement, however, not to concede even the existence of such an anomalous (?) state of affairs as we have just indiscreetly (?) discussed.

President Vincent, of the Rockefeller Foundation, said in a statement issued on June 22 that probably three-quarters of all doctors to-day are general practitioners.

Still a numerous, and, we should say, vigorous breed for a group supposed to be defunct or passing.

Perhaps Dr. Vincent included in his estimate of the number of general practitioners the versatile type of men to whom we have alluded in this editorial. If he did not include this type his figures need revision to show, perhaps, that four-fifths of the profession are general practitioners.

Dr. Vincent, by the way, is sponsoring a shrewd scheme whereby all general practitioners are to become specialists in preventive medicine.

We are willing to be called anything, provided our general practice is not interfered with. We hereby endorse Dr. Vincent's scheme.

All of which brings to mind an old French proverb which we shall paraphrase as follows: The more you change or eliminate the general practitioner the more he remains the same thing.

Amen!

Lord Dawson of Penn, the King's physician, is one of our soundest thinkers. In addressing a recent convention of American physicians in England, he remarked that "it is quite clear that, through judicious guidance of the health of youth, doctors will more and more be called upon to direct the life of the people. This can never be done by a card index system, and any examination of a man under a life insurance scheme would only produce periodically a great amount of anxiety that might undo any good otherwise achieved. Examination should be conducted by the person's private physician rather than by an officially appointed doctor."

How far away from rational moorings we are taken by methods imposed upon us by lay, commercial and "uplift" forces; that is, if we allow ourselves to be seduced from the tried and true principles laid down for us from time to time by such leaders as Lord Dawson of Penn.

Suits for Malpractice

These are becoming only too common, as shown in the recent suit against a well-known surgeon, whose name is a household word. After a long and disagreeable experience it was of course decided in his favor.

It seems to be a favorite pastime of a certain class of patients who object to paying their bills in part, or do not pretend to pay them at all, to bring suit for malpractice against their medical attendant.

Lawyers are a little too fond of "settling cases out of court." In my opinion any doctor who is so weak-kneed, or cowardly, as to pay money in order to avoid or to settle such a suit either knows that he is guilty, or else fails to recognize what is due to his own self-respect, as well as to the honor of the profession of which he is a member.

The Supreme Court of New Jersey has refused to recognize a charge of malpractice against a reputable physician or surgeon except on two counts, viz.: Actual negligence or faulty technique, as shown by the evidence, or a positive guarantee, written or verbal, made by the medical attendant that the patient will be "cured" by his treatment. This is fair enough. In these days of improved methods of diagnosis and aseptic surgical technique no man can evade his personal responsibility on the first charge. As regards a promise of a positive "cure"—that savors of the chiropractic rather than of the up-to-date doctor. But these charlatans manage to escape, while reputable physicians suffer.

It is time for us to stick together and to present a firm front to those shysters who attack our reputation and good faith because they are peeved when we try to collect our lawful debts from them. I know of three or four such suits now pending against some of our younger men, every one of which is pure bluff.

What if a man is "protected" by the Physicians' Defense Association! Fight ti out on legitimate lines and make no compromise.

Having narrowly escaped an indictment for manslaughter in my younger days, when I tried to save a girl's life after criminal abortion, I can speak feelingly on this subject. Rather than pay a cent if a suit for malpractice were decided against me, I would spend six months of calm contemplation in the Tombs and so I advise all my timid young friends. As was said by Benjamin Franklin when the Declaration of Independence was signed: "We must hang together or we shall hang separately."

HENRY C. COE.

Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

Doctor and Public

Is the old family doctor done for? President Vincent of the Rockefeller Foundation is not altogether convinced that the doom of the general practitioner impends, but he finds the threat of it serious. If it should come to pass, the loss would be heavy. The family doctor must meet the double competition of the specialist and of our rapidly developing public health service. If he is to succeed, he must transform himself from an agent of the sickroom into a force for extirpating the sickroom. He must devote himself to preventive medicine. He must earn his living as a "counselor of health." It is a sober restatement of the suggestion frequently and airily brought forward that what we need in this country is the Chinese system of paying the family doctor for the number of days in the year his patients keep well. Whether that is the actual practice in China is another story.

In urging the family doctor to go in for preventing disease instead of fighting it when it has arrived there is danger of injustice to the general practitioner as we find him today. He has never been quite the creature of pills and nasty draughts that is too often assumed. He has been ready with preventive counsel. He has warned Father against too much tobacco and too little exercise. Long before the contemporary emancipation in women's dress arrived he warned Mother and the girls against tight lacing. For the children he has insisted on moderate amounts of candy, plenty of pure milk and fresh fruit and early to bed. He has fought for the gospel of fresh air in the home against the housewife's bitter anxiety for her lace curtains. And always he has performed one of the functions which President Vincent regards as highly important. He has served as an agent "against the very real danger which is threatened by a narrowly specialist point of view."

No doubt he has still much to learn and much to change before he becomes the ideal "counselor of health." But it is only fair to point out that the attainment of that ideal depends more perhaps on the public than on himself. The perfect counselor is one who offers advice when it is needed. But the doctor is tied by his professional ethics. He cannot, under modern etiquette, stop Jones in the street and remark that Jones's color isn't what it should be and he had better step into the office for a general overhauling. The doctor cannot drop in on the family and announce that he thought it would be a good idea to look over the children's tonsils. The family doctor is not really a family doctor in the sense of being one of the family. He must wait to be called in. He cannot speak until he is spoken to. In this respect he occupies a lower plane than the inspector from the electric company or the man from the water works.

This would make it seem that if the bedside doctor is to become a health counselor the change must be initiated by the public. The family's visit to his consulting room must become as regular a feature as the preventive visit to the dentist has become and as the visit to the oculist is coming to be. Unfortunately for the general practitioner, the public does not wear its tonsils, heart and digestive organs on the outside, as it does its teeth and eyes. Otherwise the human passion for appearance would have carried us further by this time to the ideal of the doctor as health counselor.—*New York Times,* June 24, 1925.

Dr. Morris on Newspapers and the Food Supply

In the January issue of the *American Nut Journal,* Dr. Robert T. Morris, New York City, took the newspapers to task for ignoring as news of the day the interesting developments of the work of conserving a great national resource—edible nuts—while at the same time the newspaper columns were reeking with filth resulting from sensational playing-up of the rottenness of both the under-world and the upper-world. He thought the great middle world, which is too intelligent (and necessarily too busy making a living) to contribute its quota to the scare-head stuff, would be interested at least occasionally in a decent news item. He argued that upon the editors of the daily press rested the responsibility of searching for wholesome news—at least part of the time. His article in the March *Journal* was a continuation of this subject.

Some comment by the daily press was elicited, but the only communication for the *Journal* which resulted, was the one by A. W. Woodruff, San Saba, Tex., which appeared in the April issue. Mr. Woodruff's argument would be an interesting defense of the daily press editors if the latter had declined to co-operate enthusiastically in boosting an industry from the development of which a class of promoters expected to profit. He overlooks Dr. Morris' point that a small group of pioneers—scientific investigators—in an association containing not a single salaried officer, has uncovered *news items* which are so clean, so far-removed from scandal, yet sensational in their way, that they do not come under Mr. Woodruff's classification of the "main news features"—criminal, political and financial, and are therefore ignored! Perhaps it is just because many present-day newspaper managers (editors unfortunately have little to say on the subject of the policies under which the newspapers are conducted) regard that classification as a proper basis, that upon all sides there has arisen a protest against the contents of newspapers! A Des Moines newspaper, seeing the handwriting on the wall and remembering how nation-wide prohibition came about, will curtail its activities in regard to the first-named of the above classification of news. A branch of the University of Pennsylvania has been studying the front page news of great dailies. It finds that crimes and disasters do not monopolize the front pages. But it examined only eight newspapers! Any of us could arrive at a contrary verdict by examining four or forty-four newspapers.

If a newspaper management regards its field as relating mainly to criminal, political and financial subjects, it is not publishing a newspaper—it is publishing a class paper. There are real newspapers, thank goodness, which prominently feature as main classes of news, educational, social, scientific, municipal development, athletic, artistic, religious and human interest features generally as well as a due proportion of the other three classes. Somewhere in this category belongs the remarkable development of a national food supply. There is no room for it in a sporting sheet or a police gazette.

It doubtless is news that a holdup on Broadway in broad daylight has resulted in a loss of $80,000 or that a man has been murdered by cold blood as he entered the vestibule of his home. Some editors are not slow to appreciate the fact that it is also news that a substance has been discovered (or rather the newer treatment of a substance) which will produce on metal a surface harder than anything yet known and which promises to make nickel-plating last forever—and hundreds of other interesting news items of this harmless character, in practically all cases of which reporters sent out with instructions to dig for the last details in such a news item have worked under direct instructions by the editor.

Along comes from some indefinite source word that the native black walnut whose kernel is one of the most inaccessible things in nature has been "improved" to such an extent that with one blow of a hammer certain black walnuts will open in perfect halves as to the kernels. Or that one man has paid $2500, for certain reasons, for a single pecan tree, discovered in the back woods of Mississippi. A convention of nut experts is a good place to look for news items of this kind!

Now, according to Mr. Woodruff, those things do not constitute news and do not warrant the sending of a reporter or the wiring of a correspondent at some distant point to search out the facts and produce an interesting article for the consumption of readers.

One who has "held down" the city editor's desk for nearly three decades, on a big daily newspaper, with a staff of 18 bright reporters to keep busy, well knows how every tip from every source is treasured as a "lead" to an exclusive article—the kind of article which in the aggregate makes one sheet a newspaper as compared with an apology for one. The writer's daily schedules were often an arm's length in depth—resulting in combing city, county, state and nation for a "beat." And matter that was "handed in" by outsiders was often looked at askance as probably containing an "axe to grind."

It was a rare occasion when a convention in town did not provide for highly interesting special articles for use a little later, aside from the news of the proceedings for immediate use.

No—the blame is not on the nut growers for not supplying the material; it is decidedly on the warped mind of the daily newspaper "news" editor who seems seldom to be above the level of a sensation-seeker and whose waking hours are devoted to a strenuous effort to get the editions of the day off his hands in time to hike to the ball game and to procuring passes to the theatres to fill out his average day's existence.

Of how much use is it for nut growers to prepare matter to pass under the eye of the average creature of that kind? What chances will it have in the day's melee?

When it comes to a question of press agent work, the discussion is out of all bounds; for that was not the idea at all in the start. Enthusiasts in nut culture are not asking editors to print matter they hand in. They are marveling over the missing of news by newspapers. They will answer questions if interviewed and will prepare articles on request, perhaps.

Nut culture has repeatedly been declared the most interesting in many respects, as it is the newest phase of horticulture. The management of the daily press throughout the country is being challenged to produce a reason for continuation of the tiresome emphasis on crime and scandal in the newspapers and some of them are mending their ways. Nut culture deserves a place in the sun. Nut enthusiasts are justified in making constructive criticism.—*American Nut Journal*, May, 1925.

Pick's Disease

(*Continued from page* 188)

102. Moraes, B.: Poliserosite tuberculosa. Med. contemp., Lisbon, 1914, XXXII, 323-325.
103. Nicholls: Hyaloserositis. Ref. Handb. Med. sc., N. Y., 3. ed., 1915, V, 360-365.
104. Young, W. A. B.: A case of polyorrhomenitis. Lancet, London, 1915, II, 177.
105. Pedemonte, C. J.: Polyserositis. Semana Med., Buenos Aires, 1912, XIX, 246-258.
106. Ryffel and Mahon: Guy's Hosp. Rep., London, 1912, LXVI, 251-256.
107. Schmidt, A.: Ueber Gasinblasung bei Pleuritis and Peritenitis. Munchen. Med. Wchnschr., 1913, LIV, 392-394.
108. Coulford: T. B. Polyserositis, Brit. Med. J., London, 1912, I, 945.
109. Consorti: T. B. Polyserositis treated with Iodoform. Med. ital., Napoli, 1912, X, 354-356.
110. Cecikas: Morbus Bamberger Actus. Wien. klin. Wchnschr. 1912, XXV, 302-304.
111. Gilles and Ducuing: T. B. Pleuro-Peritoneale et grossesse. J. de med. de Paris, 1912, 2. s., XXIV, 566-568.
112. Smith: Serous sao distention. Med. Rec., N. Y., 1912, LXXXI, 462-464.
113. Audibert, V.: Plasmotherapy of serous inflammations. J. Med. Franc., Paris, 1910, III, 485-494.
114. Azzurini: Arch. di biol., Firenze, 1911, LXV, 343-382.
115. Braude, H.: Primary carcimoma of serous membranes. Berlin, 1911, H. Blanke, 58 p.
116. Brelet: The "penny signs" in pleurisy and ascites. Med. Press and Circ., London, 1912. n.s., XCIV, 377.
117. Briand: Autoserotherapy in serofibrinous pleurisy and hydrocele. Ann. d'hyg. et de med. colon. Paris, 1912, XV, 362.
118. Courmont: Lyon med., 1911, CXVII, 1514.
119. Courmont: Bull. Soc. med. d. hop. de Lyon, 1911, X, 756-758.
120. Hewitt: Pendulous, Pedunculated and sessile tubercles and masses in the (Cleveland, M. J., 1914, XIII, 694-705.) (serous cavities in man.)
121. Fontaine: Bordeau, 1912, A. Destout, 112 p. 140-41.
122. K. Tiesenhausen: Chronic adhesive serositis of jejunum and ileum. Arch. f. klin. Chir. 131: 296-300, 1924.

1425 Broadway.

Sacral Anesthesia

(*Continued from page* 192)

3. Posterior sacral injections are best utilized in conjunction with caudal injections.

5. This form of anesthesia is the ideal method for operations on the urinary organs via the perineal approach.

Read before the Midwood, New York, Medical Society, June 2, 1925.

REFERENCES

1. Braun, H., Local anesthesia (Edited by Harris) Phil. Leand Febiger, 1924. P. 329.
2. Lowsley, O. S., Major Urological Surgery under Sacral and Para Sacral Anesthesia. Syrg. Gyn. and Obstet. V. 37 (Nov. 23) 1923, pp. 688-692.
3. Danis, R., Le Anesthesie Regionale. Brussels Hayez, 1913. p. 160.
4. Pauchet, V., Cited by Dunn S. Regional anesthesia (Pauchet Technique), Pyila Davis & Co., 1921. p. 203.
5. Lemoine, G. L., Anesthesie Regionale et locale en Urologie, Journ d Urol, Paris, 1914. V 5. pp. 569-583.
6. Labat, G. L., Latest Achievements in the Art of Local, Regional and Spinal Anesthesia. Ann. Surg. 74, Jan., 1921. pp. 673-683.
7. Meeker, W. R. and Bonar, B. E. Regional Anesthesia in Gynecology and Obstetrics. Surg. Gyn. and Obstete, 37 (Dec.) 1923. pp. 816-840.
8. Labat, G. L., The Induction of Splanchnic Anesthesia. Ann. Surg. Vol. LXXX (August) 1924. p. 181.
9. Lowsley, O. S. and Pugh, W. S., Kidney Operations under Paravertebral anesthesia, J.A.M.A. 82 (March 29) 1924. pp. 1011-1016.
10. Laewin., Ueber die Verwendung des Novokaines in Natrium bicarbonat. Koshsaezolosungen Zuer lokalen Anesthesie (Mgnchen Med.) Woch., 1910. XXXCII. pp. 708-711.
11. Pugh, W. S., Regional Anesthesia in Surgery of the Prostate and Kidneys Int. Jour. Surg. XXXVII. Oct., 1924. pp. 436-445.
12. Labat, G. L., Regional anesthesia, Phila., W. B. Saunders, 1922. p. 15.

229 West 101st Street.

Diagnosis and Treatment

(*Continued from page* 202)

Hypotension and Endocrine Disturbances

There is a very marked relationship between endocrine disturbances and blood-pressure states either high or low. Levison claims it is difficult to accurately prove the existence of these low grade or minimal endocrine disturbances but there are many reasons why the relationship is more than suggestive. The adrenal glands, the thyroid, the pituitary alone or in various degrees of association are mentioned in this connection. Continental writers, especially the French and Italian, have much to say about adrenal insufficiency, a clinical state in which hypotension is always present. The so-called "white line" is mentioned as an important diagnostic point in this syndrome. The fingernail is very gently drawn across the skin perferably the lower thorax or upper abdomen while the patient is resting and a positive response is shown by the appearance of a white line corresponding to the line of vasoconstriction, which persists a variable time. It is sometimes possible to alleviate the symptoms in this condition by the administration of adrenalin. McCrae reports an instance of prompt and remarkable recovery after giving adrenalin by mouth in doses of 5 to 10 drops after meals.

Hoxie states that endocrine disturbances result either from exhaustion following infections or other reasons. Such a classification is at least sufficiently comprehensive. Hoxie includes the genital glands in the list of endocrine possibilities. Pal states that extracts of pituitary combined with adrenalin have a more permament effect than when the latter is given alone. Enbelbach has made a careful study of the blood-pressure readings in 500 cases of uncomplicated endoctrine diseases. cidence of hypertension which was present in 10 per cent of the series. He states that the association of hypotension with endoctrine insufficiency has long been known, especially in adrenal disturbances. It was thought formerly that there was some neutralizing, antagonistic or reciprocal action between the thyroid and the adrenalin physiologic action, but Engelbach could not determine any effect from the administration of thyroid extract in hypotension cases with suspected adrenal insufficiency.

Hoxie states that in the hypotension following acute fevers, adrenalin has been of service in raising the pressure over a short period of time. This was given intravenously in carefully regulated doses. He did not find pituitary extract of great value in overcoming hyothension. He was able to secure minor improvements for short periods of time, but it was not practical for permanent stabilization. He thinks that some of these cases are helped by thyroid and especially those cases with low pulse pressure.

Hoxie thinks that the secretion of the sex glands seem to have more to do with the maintenance of the vasomotor tone than any other one endocrine organ. However, the lack of an active principle for intravenous or subcutaneous use prevents this extract from being of definitely fixed value in a therapeutic way.

McCrae states he has found corpus luteum of value in low pressure with the menopause.—(*Ohio State Med. Jour.*)

Etiology of Infantile Diarrhea

Clark says it is a fact known to every physican that diarrhea directly follows attacks of indigestion. The digestive organs are greatly taxed to provide for the increasing need of a growing baby. Digestion is an intricate chemical process and unless all the chemical and physical conditions are fulfilled, the digestive function, like the chemical experiment, is a failure. The ever-changing intestinal mucous membrane preparing to receive a changing and increasing food supply pressages danger to the child unless the food is intelligently prepared and properly administered. The mucous membrane thus enfeebled and injured loses its bactericidal power to a great extent and a fertile soil is developed for the growth of bacteria which produce irritants and toxins injurious to the child. By this absorption the vitality and resistance of the tissues are reduced and the enfeebled body is overtaken by disease. Ignorance of the simplest rules of sanitation and the negligence in infant care is often the cause of a helathy child at first falling into the condition of malnutrition, marasmus, etc., thus becoming enfeebled readily, succumbs to the first appearance of hot weather, the intestinal mucous membrane being the favorite point of attack. In general, as the vital forces are lowered the battle against the forces of destruction is lost. Therefore, bad food, bad air, bad hygiene and hot weather are direct predisposing causes of diarrhea. In our locality, where we have plenty of room and fresh, pure air, in my opinion, the question of feeding makes up almost the sum total of the etiologic factors in the production of diarrheal disease. Overcrowding in the cities, bad hygienic surroundings.

negligence, and ignorance are in some cases responsible for diarrhea, but the majority of the cases we have to deal with in the country and smaller towns have their origin in feeding in some form. Breast feeding, of course, is the best and only food to be used when possible.

This is nature's source of supply and the milk does not have to be handled, allowing it to be contaminated and most children thus fed have a much better opportunity to survive than children not so fortunately situated. Of the breast-fed infants only a small per cent have diarrheal disease, and a still smaller per cent die, because they are healthier and stronger and better able to resist the onslaught of disease.

This brings up the subject of artificial feeding. The market is flooded with baby foods and each has its peculiar claims and advantages, but Clark, in his private practice finds that each child has to be treated and fed individually. There is no one food that you can adopt as the only one to use for some children will thrive on one while another cannot take it all. The author thinks the best and most generally well borne artificial food is the modified cow's milk. Cow's milk should be from a healthy cow and well handled, low in bacteria and pasteurized. —(*Jour. Ga. Med. Assn.*)

Chronic Acidemia

J. F. Yarbrough, of Montgomery, Ala., says that the term acidemia means a decreased alkalinity of the blood.

The Symptoms includes scarlet tongue and throat, increased secretion of saliva, gastric distress after meals, much gas in the alimentary canal, constipation or diarrhea, often mucus stools putty colored, light gray or white. If anemia is present the tongue may be just a pale flabby mass.

There are a great variety of mucus symptoms, from nervous hysterical manifestations and delusions to that of toxic mania. There are borderline cases that simulate dementia præcox so closely that a differential diagnosis requires much time and study.

Laboratory tests show acid saliva. Stomach contents show increased acidity. The percentage of hydrochloric acid is diminished or none at all. The urine shows hyperacidity. Uterine secretions and feces are acid. Blood shows decreased alkalinity.

The diet of this class of patients leads unerringly to the etiology of this pathologic state. The diets of these patients all show an incresaed ratio of carbohydrates, ranging from 1 to 5 to 1 to 15. From this increased percentage of carbohydrates we have an abnormal amount of acid by-products saturating an alkaline blood. If this intoxication is long continued we have complete saturation known as acidosis. Acidemia, then, is that condition that arises after the point of utilization has been reached and before saturation has been attained. This field that lies between utilization and saturation is the fertile soil from which spring many of our ills. We have from this toxic state pyorrhea, diarrhea, dysentery, stasis of the colon, constipation, pellagra, rheumatism, indigestion, appendicitis, cholecystitis, nephritis, vascular hypertension, hysteria, hypochondria, neurasthenia, melancholia, toxic mania, etc.

Our biologic chemists have not as yet been able to give us with mathematical precision the different percentages of fats, proteins and carbohydrates contained in different foods. Nor do we have exact knowledge of just how the different foods are utilized in the body.

In many instances we have serious toxemia in patients whose bases seem practically normal. Here we face the difficulty of knowing just what is the normal.

Many animal and human experiments conducted by the writer strongly support the theory of chronic acidemia. McCarrison induced dysentery in monkeys with carbohydrates, and cured it with green vegetables and proteins. Cotton clearly demonstrated that many mental cases are of toxis origin, and curable by diet. Smith in his presidential address before the gastro-enterological section of the Southern Medical Association at Chattanooga, made the following observations:

"During the past summer I have conducted various experiments upon many domestic animals, feeding them on different kinds and quantities of carbohydrates. Practically all of them sickened and died, in from four to ten weeks, showing principally gastro-intestinal symptoms. The viscera of two of the animals that had thus died were submitted to the Bunce and Landham Laboratory in Atlanta for examination. They reported as follows:

"Guinea Pig.—Kidney showed acute interstitial nephritis. Liver showed acute diffuse hepatitis with focal necrosis. Spleen showed diffuse splenitis with focal necrosis. Pancreas showed diffuse pancreatitis with destruction of the islands of Langerhans. Stomach showed acute diffuse ulcerative gastritis. Heart showed diffuse myocarditis.

"Rabbit.—Kidney showed acute diffuse nephritis. Liver showed areas of necrosis. Stomach showed acute diffuse gastritis. Lungs showed bronchopneumonia.

"This seems to be sufficient evidence to convince the most skeptical that chronic acidemia is a real pathologic state of carbohydrate origin. Case histories are not pleasing in scientific papers. However, I believe that the description of one here will be enough value to warrant a breach of form.

"Case History.—Mrs. F. White, married, age 26, two children. Had all the diseases incident to childhood. Physical examination revealed a red fissured tongue, scarlet throat, distended stomach and colon, constipation, many mucous stools often white. Her diet consisted of 1 of proteins to about 10 of carbohydrates. Her family physician stated that she had been a typical neurotic since girlhood. At the time of examination she was suffering from typical text-book melancholia. It was really toxic mania. The past year she had lost a babe passing thru its second summer. She was obsessed with the fear that a second babe now passing thru its second summer would also die. Her nervous state was such that the appearance of a stranger in the room would excite violent paroxysms of fear.

"Laboratory Report.—Hyperacidity of the urine, acid saliva. Combining power of carbon dioxide gas with 100 c. c. of blood 32. Normal combining power 50 to 75." (Dr. A. Trumper.)

If 50 in this case was normal, the acid bases were high. If 75 was normal, then the acid bases were exceedingly high; evidence that the alkaline bases had been reduced almost to the point of disaster. The fact that when carbon dioxide gas combines with only 16 in 100 c. c. of blood, death quickly ensues, you can imagine the seriousness of the toxemia in this case. She recovered in the sanatorium in less than six weeks. The past two years she has not shown a symptom of the former neurotic state."

Because of failure to recognize it, this pathologic state is the most important scientific problem of the day. This condition is usually diagnosed hysteria, hypochondria, neurasthenia, nervous indigestion, change of life, etc. The usual prescription is pepsin bismuth or taka-diastase, and some nerve sedative, with advice not to worry, and to think of pleasant things. This farce is repeated in practically every physician's office in reach. After the physicians have been exhausted, the chiropractor applies his "skill." Finally divers complications appear. Some inoperable, hypertension, nephritis, rheumatism, toxic mania, cardiac lesions, cancer of the liver, arteriosclerosis. Some of the operable are ulcer, cholecystitis, appendicitis, stricture of the bowel, etc. Such complications, whether operable or inoperable, mean under the generally accepted method of treatment, the close of the drama.—(*Am. Med.*, May, 1925.)

Sarcoma of the Ovary in Children and Young Girls

L. C. Scheffey reaches these conclusions in this subject:

1. The frequency of sarcoma of the ovary in general is a trifle less than 4 per cent; that of sarcoma of the ovary in children varies from 18 to 25 per cent of all ovarian neoplasms. Hence it is relatively more frequent in children and young girls than in adults.

2. The age incidence of ovarian sarcoma varies from 6.2 to 19.8 per cent below the age of twenty years. An average, 14.3 per cent occurs before the age of twenty years. The most frequent decade of life, in which it occurs, is between twenty-one and thirty years. In all cases collected up to and including twenty years of age, the greatest number, 13, were aged eighteen; 12 were aged thirteen; 10 were aged nineteen.

3. Seventy cases, 58.8 per cent, occurred at or before the age of puberty taken as fourteen years. Of these, 17, or 24.3 per cent manifested sexual precocity in one way or another. Forty-nine cases, or 41.1 per cent, occurred after fourteen years of age, and up to and including the age of twenty, with no history of precocity. Of these, 16 cases, or 32.6 per cent showed hypo-ovarian function—sexual backwardness—to some extent. Hence hyperovarian function is associated with ovarian sarcoma at or before puberty in an appreciable percentage of cases, while hypoovarian function is similarly associated with those cases occurring between puberty and twenty-years.

4. The principal objective symptom is a rapidly-growing, freely movable (sometimes fixed) abdominal or pelvic tumor. Menstrual disturbances are frequent, and there may be pronounced evidence of hyperovarian, or hypoovarian function, the former more marked before, the latter more marked after puberty. Pain and gastrointestinal symptoms are manifested later, and are those of any ovarian tumor increasing in size or meeting with an accident. Concomitant signs of malignancy are later manifestations.

5. Bilateral ovarian sarcoma are much less frequent than unilateral. In 27 of the cases no site was recorded; 42 were on the left side; 33 involved the right adnexa; 17 were bilateral.

6. Round-cell sarcoma was the most common type.

7. The diagnosis, dependent upon a careful history and examination, requires immediate operation—no contraindications obtaining. The earlier the interference, the more favorable the prognosis.

8. In the series collected, 94 cases—79 per cent—came to operation. Of these, 69—73.4 per cent—were surgical recoveries, death occurring in 20—21.2 per cent. The percentage of ultimate recoveries cannot be given with accuracy.—(*Am. Jour. Obst. & Gyn.*, April, 1925.)

Colloidal Manganese in Psoriasis

Herman Goodman of New York reports the action of colloidal manganese by intramuscular injection on psoriasis.

Goodman writes that any suggested form of treatment for psoriasis seems worthy of trial. He undertook the use of colloidal manganese and found to his surprise that the lesions of psoriasis in a particularly resistent case cleared with ease. Fearful of post hoc, proper hoc, he increased the circle of usefulness among psoriatics, being especially careful to withdraw other forms of treatment, so that the virtues of manganese, if any existed, should be dependable. Patients, who from former experiences, insisted upon some form of external therapy, received Ungt. Aq. rosae.

The preparation used was pharmasols. The manganese is 0.25 per cent, in a colloid state, and is sold either in 1 cc. ampoules or larger containers. The dose recommended for intramuscular use is one-half cc. gradually increased to 2 cc. in a course of 6 injections. The injections are given deeply into the buttocks, and there is little if any pain. The number of injections of the maximum dose (2 cc.) may be as high as six without any noticeable ill effect.

The modus operandi of colloidal manganese in psoriasis is not known. Goodman's conjecture is that manganese affects the capillary blood vessels in the pars papillaris, but has not made a large enough series of examinations of psoriatic skin under treatment. Recurrence of the old patches has already been noted.

The clinical results on the empiric use of colloidal manganese of commerce makes its wider use of interset at this time.—(*Med. Review of Reviews.*)

Endocrines and Rheumatic Diseases

In the British Isles there are no fewer than fifty thousand children of school age who are the victims of organic heart disease. The statistical bulletin of the Metropolitan Life Assurance Company, New York, states that about one in every five of the population living at the age of ten will ultimately succumb to organic heart disease.

Convinced as many are of the infective origin of rheumatic fever, there is unquestionably another side, which calls for deliberate consideration. We can ill afford to leave any avenue unexplored. It is not a question simply of infection but of something vastly wider and more profound in a biochemical sense. For, as many maintain, if hypothyroidism is infinitely more common than is generally conceived, then we have to face the fact that a vast number of children start life crippled, in a metabolic sense, by their lack of thyroid hormones. Moreover, if we dwell for a moment on the far reaching cellular consequences of such thyroid famine, we see that the superficial minor signs of thyroid inadequacy are but the outward reflection of occult metabolic obliquities involving cellular metabolism as a whole. This being so, it may well be, as Llewellyn suggests, that the first stage of the rheumatic heart in a child may be purely metabolic, a failure in nutrition of the cardiac substance due to deficient or perverted thyroid hormones, and surely nothing could so favor a secondary implantation of wandering microbes. It is in truth the rheumatism of childhood that calls for intensive research, if we would eradicate this scourge.

The suggestion of Llewellyn of London that rheumatism in childhood arises from a subthyroidic substrate, should, if confirmed, appeal to many, in that it opens up a possible avenue whereby this menace of childhood may be prevented, or its effects controlled or minimized. The nervous instability of rheumatic children is notorious, and their proneness to tetany and symptoms of vasomotor ataxia are distinctly suggestive of some inherited endocrine instability. That rheumatic fever occurring in the children of the actually goitrous, or those living in endemic areas, may prove obdurate to salicylates and yet respond if thyroid be superadded, may be not only a therapeutic boon but, as Llewellyn suggests, an etiological hint of profound significance. It raises the possibility not only that subthyroidism portends a greater liability to rheumatism, but also that its timely correction may haply stave off rheumatic fever or cardiac rheumatism. It clearly indicates that school officers must be quick to detect the minor signs of hypothyroidism in children. Especially in children coming of rheumatic stock should we be alive to the possibility of inherited thyroid deficiency or instability. Again, if the children live in goitrous districts iodine prophylaxis and the provision of a bacteriologically pure water supply are clearly of paramount importance, especially if it should transpire that the incidence of rheumatic diseases is markedly higher in goitrous as opposed to nongoitrous localities. For it seems certain from the observations of Berry and McCarrison that goitre is prone to develop in marshy, badly drained neighborhoods, with which rheumatism also has been from time immemorial associated.

Nor can we overlook the fact that not only rheumatism, but rheumatoid and osteoarthritic affections are apparently more common in goitrous districts. Thus, McCarrison states that in goitrous regions of the Himalayas the prevalence of rheumatoid arthritis among the victims of goitre is such as to suggest a similarity of origin. That the osteoarthritis of women at or after the menopause is frequently associated with goitre or subthyroidism is generally admitted, and in short the evidence that rheumatoid arthritis and osteoarthritis are intimately associated with thyroid disorders is undeniable. The latter may take the form of Grave's disease, or states of hyperthyroidism or more often hypothyroidism, or actual myxedema frequently correlated with goitre. Moreover, the dramatic manner in which rheumatoid arthritis and osteoarthritis respond to thyroid therapy when given in suitable cases strongly suggests that thyroid inadequacy or instability favors their development. The fact that rheumatoid arthritis and scleroderma have followed thyroidectomy or exposure of the thyroid gland to x rays is highly suggestion of a casual nexus. Moreover, we have Deaver's recent statement that after partial thyroidectomy for goitre, especially the toxic variety, resistance is lowered to rheumatism and acute endocarditis.

Reverting now to rheumatic fever, French physicians have long insisted that subacute thyroiditis is commonly present at the onset or during the course of the disorder. That this fact should not have attracted more attention in other countries is somewhat astonishing. It may well be that this is due to the fact that not only is the thyroid swelling usually slight and fleeting in duration, but occasions no spontaneous pain. Despite absence of pain, however, the thyroid lobes are exquisitely tender if compressed digitally. It may well be then that routine palpation of the thyroid in rheumatic fever may reveal that such tenderness of the thyroid is present as Vincent claimed in sixty-eight per cent of the cases. The thyroid swelling or tenderness usually responds to salicylates, and more swiftly than the joint swellings. On the other hand, it may persist, and the symptoms of hyperthyroidism or even Graves's disease be superadded.

In conclusion, we would plead for a more open mind in regard to the etiology of rheumatic and rheumatoid disorders. The following points seem worthy of further research. To begin with: Are rheumatic disorders generally more prevalent in goitrous than in nongoitrous areas? If so, has the installation of iodine prophylaxis been followed by diminution in their incidence? Do children of rheumatic stock commonly show signs of hypothyroidism? If so, timely thyroid therapy might diminish their liability to cardiac rheumatism. Research along such lines could not fail to be helpful, for unquestionably the etiological relationship of goitre to diseases other than Graves's syndrome, myxedema and cretinism urgent calls for investigation and research in the sphere of arthritic disorders.—(*N. Y. Med. Jour.*, May 20, 1925.)

Diabetes Mellitus

C. B. Drake of St. Paul Minn. Says that the light of our present knowledge diabetes mellitus may be defined as a persistent abnormality of the carbohydrate metabolism caused by a diminished function of the islands of Langerhans of the pancreas, characterized by inability of the body to store and utilize glucose, resulting in a hyperglycemia with or without glycosuria.

The pathology commonly associated with diabetes is a hyaline degeneration and atrophy of the islands of Langerbands. The kidneys show at times a peculiar hyaline degeneration in the epithelium of the straight tubules which Ehrlich proved consisted of glycogen deposits. The liver commonly contains less than the normal amount of glycogen, depending on the severity of the disease. This failure on the part of the liver and muscles to store glycogen and the failure of the tissues to utilize glucose are the two outstanding characteristics of diabetes.

In diabetes the normal conversion of glycogen to glucose and of lactic acid to glucose persists, but the normally reversible character of these reactions, that is, the glucose to glycogen and glucose to lactic acid, is interfered with. Just why the glucose molecule is not utilized is not known. The defect lies apparently somewhere in the process of the conversion of glucose to lactic acid and therefore is not an oxidative defect. Shaffer thinks it likely that there is a failure of conversion of the alpha and beta glucose to the gamma form, the forms differing in their optical rotation. In diabetes the blood sugar does not show the low optical rotation found normally. Insulin corrects this.

It is known that the burning of fat in the body is dependent on the burning of sugar. Acetoacetic acid must combine with

a product of the oxidation of glucose before it can be itself oxidized. There is some evidence that the acidosis in diabetes may be sufficient to prevent the normal rotation changes of the blood sugar and further prevent glucose utilization. However, attributing failure in the utilization of glucose to acidosis is putting the cart before the horse.

The discovery of insulin has been of assistance in throwing light upon some of the problems associated with carbohydrate metabolism. Insulin raises the respiratory quotient, lowers the blood sugar and increases the glycogen content of the liver. It seems to act quantitatively and will lower the blood sugar in a normal as well as a diabetic. It may produce a profound and prolonged fall in blood sugar if no glycogen is available, while the reaction may be transient if glycogen is available. The application to the treatment of severe diabetes with little available glycogen is apparent. Insulin shock will occur experimentally whether the liver has been removed or not—an indication that tissue utilization rather than liver storage is mainly responsible for the lowering of blood sugar.

Von Noorden has stated that the acute infections such as angina, influenza, measles and scarlet fever have an etiological bearing.

Joslin found a family or hereditary history in 21 per cent of his cases and obesity present in 40 per cent. He has recently expressed the opinion that the high incidence of diabetes in the Jewish race is due to obesity rather than nationality. Beeler and Fitz investigated the carbohydrate tolerance in individuals overnight in an effort to show them prediabetics. Their result were disappointing in that the blood sugar curves were nearly normal in the majority of cases. No prediabetic tendency in fat individuals as a whole was proven.

Arteriosclerosis is frequently associated with diabetes. It is commonly of the senile type and Joslin calls attention to the absence of arteriosclerosis in the severe acute forms under fifty years of age. In elderly individuals the relation of the arterial change to the diabetes is much the same as its relation to nephritis. Sometimes it seems the cause and at other times the effect.

The structural change commonly found in the pancreas in diabetes a previous pancreatitis and yet very rarely can the diagnosis or even a suggestive history of a pancreatitis be associated with a diabetes. On the contrary according to Garrod glycosuria is rare in a grave pancreatitis. He cites a case reported in 1909 by Barberi of a boy six years old who six days after the development of mumps experienced a severe epigastric pain, presumably due to a pancreatitis, which was followed by a temporary glycosuria. Von Noorden is of the opinion that a lowered tolerance in ferbile conditions is due to toxic action on the pancreas.

The intimate association anatomically of the biliary system and the pancreas suggests a casual relation. An occasional instance has been reported of temporary glycosuria following a catarrhal jaundice. Lichty, in a review of 23,464 patients, found 1,474 with gall-bladder and duct disease, in only six of which was the existence of both diabetes and biliary tract disease verified. In three of these six cases the diabetes apparently was cured following operation for cholecystitis. It is well to bear in mind then the possible though rare etiological relation between the two diseases. (*Minn. Med.*, June, 1925.)

A Luetic Lay

By JOHN GAY
(Eng. 1865-1732)

'I knew a yeoman, who for thirst of gain,
To the great city drove from Devon's plain
His numerous lowing herd. His heards he sold
And his deep leathern pocket bagged with gold.
Drawn by a fraudful nymph, he gazed, he sighed;
Unmindful of his home and distant bride.
She leads the willing victim to his doom
Through winding alleys, to her cob-web room;
Thence through the streets he reels from post to post
The vagrant wretch the assembled watchmen spies,
He waves his hanger, and their poles defies.
Deep in the roundhouse, pent all night he snores,
And the next morning, vain his fate deplores;
Ah! hapless swain! unused to pains and ills.
Canst thou forgo roast beef for nauseous pills?
How wilt thou lift to heaven thy eyes and hands,
When the long scroll the surgeon's fees demands?
Or else (Ye Gods, avert that worst disgrace)
Thy ruined nose falls level with thy face;
Then shall thy wife thy loathesome kiss disdain.
And wholesome neighbors from thy mug refrain."

Clinical Medicine suggests that we progress, though slowly. We now, at least, have sanitary drinking cups—and the Arsphenamines. If the worst comes, there are plastic surgeons and celluloid noses.—

Medical Happenings

Mid-Year Meeting of the American Academy of Physiotherapy

This organization held its mid-year meeting at Atlantic City, on May 25th and 26th, under the Presidency of Dr. Frank B. Granger, of Boston.

Among the interesting subjects presented was a paper by Dr. Harry E. Mock of Chicago, stressing, from a surgeon's standpoint, the value of physiotherapy as an adjuvant to surgery in the rehabilitation of traumatic cases.

The value of diathermy in the treatment of joint tuberculosis and of bone lesions was demonstrated by Dr. Charles P. Hutchins of Syracuse, N. Y., in a paper entitled "Report of Tuberculous Knee Treated by Physiotherapy," and by Dr. Willis W. Carey of Fort Wayne, Ind., in a paper on "Diathermy in Bone Lesions."

In a paper on the "Physics of Medicine" Dr. Charles P. Stokes of New York, reviewed the history and development of molecular physics.

Prof. W. T. Bovie of the Physiological Laboratory of Harvard University delivered an address liberally illustrated with lantern slides on the "Effect of Light on Growth and Development," in which he discussed the modern physics of light with particular reference to the ultraviolet rays.

Two papers which dealt with the therapeutics of ultraviolet light were those of Dr. Charles R. Brooke, of New York, on "The Value of the Ultraviolet Rays in the Treatment of Nasal and Oral Conditions," and that of Dr. Frank A. Davis on "The Blood Chemistry and Results of Ultraviolet Ray Therapy in Certain Tuberculous and Other Cases."

One of the outstanding features of the meeting was the symposium on "Electro-Surgical Methods" which Dr. Howard A. Kelly characterized in his paper as "The New Surgery." He described the technique by which a cutting operation is facilitated hemmorrhage controlled, and the lymphatics are sealed by the use of electrothermic methods. He emphasized that by these methods shock was diminished, the time of the operation greatly shortened and the risk of infection markedly decreased.

Other papers covering this subject were the following: "Electrocoagulation in Surgery," by Dr. William D. McFee of Boston, Mass., "The Present Status of Electrothermic Methods in Surgery," by Dr. William L. Clark of Philadelphia; "Endothermy: The New Surgery in Accessible Cancer and Pre-Cancerous Conditions," by Dr. George A. Wyeth.

All papers were profusely illustrated by lantern and by film.

Dr. Grant E. Ward opened the discussion and gave a lantern slide demonstration, including that of the electrocoagulation method of hemostasis.

Among others who contributed to the program were Dr. Walter C. Barker who read a paper entitled "Diagnostic Value of X-Ray Examination of the Gall Bladder after the Intraveneous Injection of Tetraidophenolphthalein;" Dr. Eberhard of Philadelphia who gave a lantern demonstration on "Non-surgical Biliary Drainage; "Dr. H. E. Stewart who reported his experiments with "Diathermy in a Case of Pneumonia Following Typhoid and Complicated by Diabetes;" Dr. H. C. Westervelt who spoke on the subjects covered under the name of "Backache" and Dr. Robert E. Peck of New Haven who read a paper entitled "A Plea for the More General Use of Hydrotherapy by Physiotherapists."

The next Annual Meeting of the Academy will be held in Boston during October.

The President-Elect of the A. M. A.

The election of Dr. Wendell Christopher Phillips of New York to the presidency of the American Medical Association is a recognition of many years of service to organized medicine and of seven years of exceptional service as a trustee. During his trusteeship, Dr. Phillips was for part of the time chairman of the board, and for several years a member of the Executive Committee. In addition to attending the regular sessions of the board, he journeyed from New York to Chicago each month, giving several days of his time to the business of the Association. He was also a member of the House of Delegates of the Association for six years, 1912-1917.

Dr. Phillips was born in Hammond, N. Y., June 9, 1859. He is the son of Samuel and Mary (Merrill) Phillips, was educated at Potsdam (N. Y.) Normal School, 1876-1879, and received his degree in medicine from the University Medical College of New York University in 1882. He devoted himself promptly to diseases of the ear, nose and throat, becoming consulting aural surgeon to the New York Postgraduate and Flushing hospitals, and aural surgeon to the Manhattan Eye and Ear Hospital. Dr. Phillips is a member of the American and of the New York otolaryngologic societies, and was president

of the American Laryngological, Rhinological and Otological Society in 1907. He is also a member of the New York Academy of Medicine, and was president of the Medical Society of the State of New York in 1912.

He has contributed widely to the subject of otology in medical literature, including a book, "Diseases of the Ear, Nose and Throat, Medical and Surgical," which is used as a textbook in many leading medical colleges.

Fellowship in Neuropsychiatry at Univ. of Pa.

Five fellowships in neuropsychiatry are available in the Graduate School of Medicine of the University of Pennsylvania. These fellowships have been established for the period of three years from October 12, 1925, by the Commonwealth Fund of New York.

No definite fellowship stipend has been fixed; but it will in each case approximate $2,200 per annum. The precise stipend will in each case be designated by the fellowship committee.

The minimal qualifications for applicants are: (a) age, from 25 years to 35 years inclusive; (b) graduate of a Class A medical school; (c) one year's approved internship; (d) satisfactory references; (e) approval of personal and professional status.

Applications are invited for these fellowships and should be addressed to "Dean, Graduate School of Medicine, University of Pennsylvania, Philadelphia."

A synopsis of the plan of study, etc., under the fellowships follows:

General

Each fellowship is upon the basis of three years' (36 months) work—one year fundamental, one year practical, one year investigative.

Special

I. Begin in mid-October and continue until mid-June with:

(a) Laboratory studies of comparative anatomy, human embryology, neuroanatomy, neurophsiology, neuropathology and autopsies—two-thirds of scheduled time for period;

(b) French or and German and psychology (psychometric; vocational)—one-sixth of scheduled time for period;

(c) Selected neurologic and psychiatric and child guidance clinics, instruction in the latter to include method and theory of social case work—one-sixth of scheduled time for period;

(d) Unscheduled work in pertinent medical literature, meetings of neurologic and psychiatric societies and study—two hundred to four hundred unscheduled hours for period.

11. Continue until mid-October as resident in psychiatric hospital—full time for period.

III. Continue until mid-June with:

(a) Laboratory studies of biochemistry, serology, and neuropathology with special reference to psychiatric problems—three-eighths of scheduled time for period;

(b) Handling of patients in psychiatric, child guidance and neurologic clinics and wards—three-eighths of scheduled time for period;

(c) Preparation of a text or monograph upon an assigned pertinent subject and original paper for publication—one-quarter of scheduled time for perid;

(d) Duplicate of I (d).

IV. Duplicate of II.

V. Continue until mid-June with:

(a) Research and preparation of publication thereon in field of child guidance from the standpoint of the specially trained psychiatrist—one-half to three-quarters of scheduled time for period;

(b) Child guidance clinic work—one-quarter to one-half of scheduled time for period;

(c) Triplicate of I (d).

VI. Triplicate of II.

VII. The herein fellows shall be candidates for the degree of Doctor of Medical Science (Sc.D. Med.) for graduate work in neuropsychistry, said degree conferrable in mid-February following the completion of the 36 months' candidacy as above; but the candidate is not expected to remain in University attendance in the period from mid-October to mid-February. During the candidacy the fellow must comply with customary academic regulations. The most important of these is that if the work of the fellow is unsatisfactory the fellowship, etc., must terminate. Appraisals of work will usually occur at the termini of the six periods mentioned above. For example, the candidate would be unsatisfactory if the monograph presented by him showed him to be unfitted properly to consult medical literature and make a creditable critical review thereof. Et cetera.

VIII. Physicians who can present the minimal qualifications, and who can in addition present qualifications paralleling certain of those intended for him to acquire during his candidacy, will be given appropriate time and subject credits; but the maximum time credit would be 24 months and no subject credit could exclude the research requirement.

IX. The fellowships shall be administered by a joint committee composed of the following persons: Dr. G. H. Meeker, Dean, Graduate School of Medicine. University of Pennsylvania; Dr. T. H. Weisenburg and Dr. Edward A. Strecker of the Graduate School of Medicine M;iss Mildred C. Scoville, The Commonwealth Fund; Dr. Frankwood E. Williams, Medical Director, the National Committee for Mental Hygiene Dr.; Ralph P. Truitt, Director, Division on Prevention of Delinquency, The National Committee for Mental Hygiene.

The Functions of the fellowship committee shall be as follows:

(a) The selection of fellows;

(b) Determination of the amounts of fellowship awards;

(c) Specification of time assigned to subjects within the group-time allotments;

(d) Termination of fellowship awards;

(e) To rule as necessary upon points within the fellowships;

(f) To make such changes in the plan as may be found to be desirable.

Noted Chemists Will Give Aid to Secretary Hoover

The appointment of an advisory committee composed of outstanding members of the chemical industry to cooperate with the Department of Commerce has been announced by Secretary Hoover.

The purpose of this committee is to assist the chemical division of the department in mapping out a program of work which will be of the most practical and immediate benefit to the industry.

The membership of the committee, as announced by Secretary Hoover, includes Dr. Leo Bakeland, president, American Chemical Society and inventor of bakelite; Dr. A. S. Burdick, president of the Abbott Laboratories of Chicago, and formerly president of the American Drug Manufacturers' Association; Dr. H. E. Howe, editor of the *Journal of Industrial and Engineering Chemistry;* Dr. Charles H. Herty, president of the Synthetic Organic Chemical Manufacturers' Association; Henry Howard, chairman of the board of governors of the Manufacturing Chemists' Association; G. Ober, president of G. Ober & Sons, Baltimore, and past president of the National Fertilizer Association; E. G. Trigg, president of John Lucas & Co., Philadelphia, and president of the Agricultural Insecticide and Fungicide Association; A. Cressy Morrison, president of the Acetylene Gas Manufacturers' Association, and S. W. Wilder, secretary of the Manufacturing Chemists' Association.

Dr. Bickham Honored

Dr. Warren S. Bickham, 440 Riverside Drive, New York, was honored with the honorary degree of LL.D., which was conferred upon him by the Tulane University, New Orleans, at the recent commencement.

Operations in Absentia

A French surgeon attached to the St. Louis Hospital in Paris has invented a new device whereby medical sudents in an adjoining lecture-room may observe every detail of an operation without disturbing either the patient or the operator by their actual presence on the scene. An ingenious arrangement of lights and mirrors enables them to follow every movement of the operating surgeon, and for their convenience the whole picture is considerably enlarged. Moreover, a loud speaker carries to them the comments of the operating surgeon upon his work.

The new device, which has been named the episcope, is the invention of a young French physician, Dr. Thuillant. The St. Louis Hospital possesses the only one at present in use, but a second is being intalled at the Ecole Dentaire.—*The Living Age*, Feb. 14, 1925.)

Jealousy

Jealousy is not confined to opera-singers; you find it chiefly in soldiers and doctors. I think the only profession exempt from it, that I have encountered,—for what reason I do not know,—is the Bar.

Success affects men and women very differently. I have known a few who were improved by it; some made by it; but most get their heads turned and are ruined by it. I should much like to have experienced it—even for a short time—to know how it would have affected me; but I can affirm truth that I have never been jealous of it. On the contrary I think life would be a drab place if we all walked the same pace, and I follow with joy every good thing that turns up for my friends.—Margot Asquith, *London Magazine*, December, 1924.